

Industrial Commission of North Dakota  
Oil and Gas Division  
Spill / Incident Report

Date/Time Reported : Dec 25 2013 / 11:47

State Agency person :

Responsible Party : Oasis Petroleum

Well Operator : OASIS PETROLEUM NORTH AMERICA LLC

Date/Time of Incident : 12/25/2013 12:00:00 AM

NDIC File Number : 22099

Facility Number : 15623.1

Well or Facility Name : YUKON 5301 41-12T

Type of Incident : Stuffing Box Leak

Field Name : BAKER

County : MCKENZIE

Section : 12

Township : 153

Range : 101

Quarter-Quarter :

Quarter :

Distance to nearest residence : 1 Miles

Distance to nearest water well : 1 Miles

Release Oil : 4 barrels

Release Brine : 0 barrels

Release Other : 0 barrels

Recovered Oil : 4 barrels

Recovered Brine : 0 barrels

Recovered Other : 0 barrels

Has/Will the incident be reported to the NRC? : Unknown

Was release contained : Yes - on Facility Site

Description of other released substance :

Immediate risk evaluation :

Followup Report Requested Y/N : N



# SUNDRY NOTICES AND REPORTS ON WELLS FORM

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)



Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input type="checkbox"/> Notice of Intent	Approximate Start Date
<input checked="" type="checkbox"/> Report of Work Done	Date Work Completed <b>November 2, 2013</b>
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date

- |   |   |
|---|---|
| <input type="checkbox"/> Drilling Prognosis   | <input type="checkbox"/> Spill Report             |
| <input type="checkbox"/> Redrilling or Repair | <input type="checkbox"/> Shooting                 |
| <input type="checkbox"/> Casing or Liner      | <input type="checkbox"/> Acidizing                |
| <input type="checkbox"/> Plug Well            | <input type="checkbox"/> Fracture Treatment       |
| <input type="checkbox"/> Supplemental History | <input type="checkbox"/> Change Production Method |
| <input type="checkbox"/> Temporarily Abandon  | <input type="checkbox"/> Reclamation              |
| <input type="checkbox"/> Other                | <b>Well is now on pump</b>                        |

Well Name and Number  
**Yukon 5301 41-12T**

Footages <b>255 F S L</b>	Qtr-Qtr <b>650 F W L SWSW</b>	Section <b>12</b>	Township <b>153 N</b>	Range <b>101 W</b>
Field <b>Cottonwood</b>	Pool <b>Bakken</b>	County <b>McKenzie</b>		

## 24-HOUR PRODUCTION RATE

Before	After	Oil	Oil
Water	Water	Bbls	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

## DETAILS OF WORK

Effective November 2, 2013 the above referenced well is on pump.

Tubing: 2-7/8" L-80 tubing @ 10090

Pump: 2-1/2" x 2.0" x 24' insert pump @ 10029

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281 404-9563</b>	
Address <b>100 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Heather McCowan</b>	
Title <b>Regulatory Assistant</b>	Date <b>November 7, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

## FOR STATE USE ONLY

<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date <b>12/13/13</b>	
By 	
Title <b>Regulatory Assistant</b>	



**WELL COMPLETION OR RECOMPLETION REPORT - FORM 6**

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFSN 2468 (04-2010)



Well File No.  
**22099**

**PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.**

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

**Designate Type of Completion**

- Oil Well       EOR Well       Recompletion       Deepened Well       Added Horizontal Leg       Extended Horizontal Leg  
 Gas Well       SWD Well       Water Supply Well       Other:

Well Name and Number <b>Yukon 5301 41-12T</b>		Spacing Unit Description <b>T153N R101W Sec 13 &amp; 24</b>	
Operator <b>Oasis Petroleum North America</b>		Telephone Number <b>(281) 404-9563</b>	Field <b>Baker</b>
Address <b>1001 Fannin, Suite 1500</b>		Pool <b>Bakken</b>	
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>	Permit Type <input checked="" type="checkbox"/> Wildcat <input type="checkbox"/> Development <input type="checkbox"/> Extension

### **LOCATION OF WELL**

Type of Electric and Other Logs Run (See Instructions)

NA

**CASING & TUBULARS RECORD (Report all strings set in well)**

#### **PERFORATION & OPEN HOLE INTERVALS**

## **PRODUCTION**

Current Producing Open Hole or Perforated Interval(s), This Completion, Top and Bottom, (MD Ft) <b>Lateral 1 - 11108-21220</b>							Name of Zone (If Different from Pool Name)		
Date Well Completed (SEE INSTRUCTIONS) <b>September 9, 2013</b>			Producing Method <b>Flowing</b>		Pumping-Size & Type of Pump			Well Status (Producing or Shut-In) <b>Producing</b>	
Date of Test <b>09/10/2013</b>	Hours Tested <b>24</b>	Choke Size <b>31 /64</b>	Production for Test		Oil (Bbls) <b>863</b>	Gas (MCF) <b>0</b>	Water (Bbls) <b>1789</b>	Oil Gravity-API (Corr.) <b>42.0 °</b>	Disposition of Gas <b>Flared</b>
Flowing Tubing Pressure (PSI)		Flowing Casing Pressure (PSI) <b>949</b>		Calculated 24-Hour Rate	Oil (Bbls) <b>863</b>	Gas (MCF) <b>0</b>	Water (Bbls) <b>1789</b>	Gas-Oil Ratio <b>0</b>	

## GEOLOGICAL MARKERS

## **PLUG BACK INFORMATION**

## CORES CUT

Top (Ft)	Bottom (Ft)	Formation	Top (Ft)	Bottom (Ft)	Formation

## Drill Stem Test

Test Date	Formation	Top (Ft)	Bottom (Ft)	BH Temp (°F)	CL ppm	H2S ppm	Shut-in 1 (PSIG)	Shut-in 2 (PSIG)
-----------	-----------	----------	-------------	--------------	--------	---------	------------------	------------------

## Drill Pipe Recovery

## Sample Chamber Recovery

Test Date	Formation	Top (Ft)	Bottom (Ft)	BH Temp (°F)	CL ppm	H2S ppm	Shut-in 1 (PSIG)	Shut-in 2 (PSIG)
-----------	-----------	----------	-------------	--------------	--------	---------	------------------	------------------

## Drill Pipe Recovery

## Sample Chamber Recovery

Test Date	Formation	Top (Ft)	Bottom (Ft)	BH Temp (°F)	CL ppm	H2S ppm	Shut-in 1 (PSIG)	Shut-in 2 (PSIG)
-----------	-----------	----------	-------------	--------------	--------	---------	------------------	------------------

## Drill Pipe Recovery

## Sample Chamber Recovery

## Drill Pipe Recovery

### Sample Chamber Recovery

Test Date	Formation	Top (Ft)	Bottom (Ft)	BH Temp (°F)	CL ppm	H2S ppm	Shut-in 1 (PSIG)	Shut-in 2 (PSIG)
10/10/2023	Marcellus	5000	4000	100	10	10	1000	1000

...the recovery

#### Sample Chamber Recovery

**Well Specific Stimulation**

Date Stimulated <b>08/31/2013</b>	Stimulated Formation <b>Bakken</b>		Top (Ft) <b>11126</b>	Bottom (Ft) <b>21220</b>	Stimulation Stages <b>36</b>	Volume <b>100130</b>	Volume Units <b>Barrels</b>
Type Treatment <b>Sand Frac</b>	Acid %	Lbs Proppant <b>3649776</b>			Maximum Treatment Pressure (PSI) <b>9294</b>	Maximum Treatment Rate (BBLS/Min) <b>39.0</b>	
Details <b>100 Mesh: 124,804</b> <b>40/70 White: 1,416,922</b> <b>20/40 Ceramic: 2,108,050</b>							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant			Maximum Treatment Pressure (PSI)	Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant			Maximum Treatment Pressure (PSI)	Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant			Maximum Treatment Pressure (PSI)	Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant			Maximum Treatment Pressure (PSI)	Maximum Treatment Rate (BBLS/Min)	
Details							

**ADDITIONAL INFORMATION AND/OR LIST OF ATTACHMENTS**

			
--	--	--	--

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records.	Email Address <b>hmccowan@oasispetroleum.com</b>	Date <b>10/09/2013</b>
Signature 	Printed Name <b>Heather McCowan</b>	Title <b>Regulatory Assistant</b>

WELL COMPLETION OR RECOMPLETION REPORT - FORM 6  
SFN 2468

1. This report shall be filed by the operator with the Commission immediately after the completion of a well in an unspaced pool or reservoir. Please refer to Section 43-02-03-31 of the North Dakota Administrative Code (NDAC).
2. This report shall be filed by the operator with the Commission within thirty (30) days after the completion of a well, or recompletion of a well in a different pool. Please refer to Section 43-02-03-31 NDAC.
3. The well file number, operator, well name and number, field, pool, permit type, well location(s), and any other pertinent data shall coincide with the official records on file with the Commission. If it does not, an explanation shall be given.
4. If a parasite string was used in the drilling of a well, the size, depth set, cement volume used to plug, and the date plugged shall be included. This information may be included in the "Additional Information" portion of the report or included as an attachment.
5. In the "Perforation & Open Hole Intervals" table, each borehole should be identified in the "Well Bore" column (vertical, sidetrack 1, lateral 1, etc.). On horizontal or directional wells, the following information shall be entered in the table if applicable: pilot hole total depth, kick-off point, casing windows, original lateral total depth, and all sidetracked interval starting and ending footages.
6. In the "Production" section, list all the current producing open hole or perforated intervals associated with the production rates reported. Oil, gas, and water rates and recoveries from perforations or laterals tested but not included in the completion should be included in the "Additional Information" portion of the report or included as an attachment.
7. In The "Date Well Completed" portion of the form please report the appropriate date as follows:
  - An oil well shall be considered completed when the first oil is produced through wellhead equipment into tanks from the ultimate producing interval after casing has been run.
  - A gas well shall be considered complete when the well is capable of producing gas through wellhead equipment from the ultimate producing zone after casing has been run.
  - For EOR or SWD wells, please report the date the well is capable of injection through tubing and packer into the permitted injection zone. Also, please report the packer type and depth and the tubing size, depth, and type. The packer and tubing type may be included in the "Additional Information" portion of the report.
8. The top of the Dakota Formation shall be included in the "Geological Markers."
9. Stimulations for laterals can be listed as a total for each lateral.
10. The operator shall file with the Commission two copies of all logs run. Logs shall be submitted as one digital TIFF (tagged image file format) copy and one digital LAS (log ASCII) formatted copy, or a format approved by the Director. In addition, operators shall file two copies of drill stem test reports and charts, formation water analyses, core analyses, geologic reports, and noninterpretive lithologic logs or sample descriptions if compiled by the operator.
11. A certified copy of any directional survey run shall be filed directly with the Commission by the survey contractor.
12. The original and one copy of this report shall be filed with the Industrial Commission of North Dakota, Oil and Gas Division, 600 East Boulevard, Dept. 405, Bismarck, ND 58505-0840.



## AUTHORIZATION TO PURCHASE AND TRANSPORT OIL FROM LEASE - Form 8

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5698 (03-2000)



Well File No.
22099
NDIC CTB No.
2 22100

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND FOUR COPIES.

*mckinzie*

Well Name and Number <b>YUKON 5301 41-12T</b>	Qtr-Qtr <b>SWSW</b>	Section <b>12</b>	Township <b>153 N</b>	Range <b>101 W</b>	County <b>Williams</b>
--	------------------------	----------------------	--------------------------	-----------------------	---------------------------

Operator <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>(281) 404-9573</b>	Field <b>BAKER</b>
--	---	-----------------------

Address <b>1001 Fannin, Suite 1500</b>	City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
---	------------------------	--------------------	--------------------------

Name of First Purchaser <b>Oasis Petroleum Marketing LLC</b>	Telephone Number <b>(281) 404-9573</b>	% Purchased <b>100%</b>	Date Effective <b>September 10, 2013</b>
Principal Place of Business <b>1001 Fannin, Suite 1500</b>	City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Field Address	City	State	Zip Code
Transporter <b>Hiland Crude, LLC</b>	Telephone Number <b>(580) 616-2058</b>	% Transported <b>75%</b>	Date Effective <b>September 10, 2013</b>
Address <b>P.O. Box 3886</b>	City <b>Enid</b>	State <b>OK</b>	Zip Code <b>73702</b>

The above named producer authorizes the above named purchaser to purchase the percentage of oil stated above which is produced from the lease designated above until further notice. The oil will be transported by the above named transporter.

Other First Purchasers Purchasing From This Lease	% Purchased	Date Effective
Other First Purchasers Purchasing From This Lease	% Purchased	Date Effective
Other Transporters Transporting From This Lease	% Transported	Date Effective
<b>Prairie Field Services, LLC</b>	<b>25%</b>	<b>September 10, 2013</b>
Other Transporters Transporting From This Lease	% Transported	Date Effective
Comments		

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records.	Date <b>October 1, 2013</b>
Signature <i>Annette Terrell</i>	Printed Name <b>Annette Terrell</b>
	Title <b>Marketing Assistant</b>

Above Signature Witnessed By:	
Signature <i>Dina Barron</i>	Printed Name <b>Dina Barron</b>
	Title <b>Mktg. Contracts Administrator</b>

FOR STATE USE ONLY

Date Approved <b>OCT 11 2013</b>
By
Title

*Evie Peterson*

Oil &amp; Gas Production Analyst

Industrial Commission of North Dakota  
Oil and Gas Division

Well or Facility No

**22099**

Verbal Approval To Purchase and Transport Oil      Tight Hole      Yes

**OPERATOR**

Operator <b>OASIS PETROLEUM NORTH AMERICA LL</b>	Representative <b>Cody Jeannotte</b>	Rep Phone
---	---	-----------

**WELL INFORMATION**

Well Name <b>YUKON 5301 41-12T</b>	Inspector <b>Richard Dunn</b>
Well Location    QQ               Sec               Twp               Rng	County <b>MCKENZIE</b>
SWSW    12    153    N    101    W	Field <b>BAKER</b>
Footages            255      Feet From the S Line	Pool <b>BAKKEN</b>
710      Feet From the W Line	
Date of First Production Through Permanent Wellhead	9/9/2013
	<b>This Is Not The First Sales</b>

**PURCHASER / TRANSPORTER**

Purchaser <b>OASIS PETROLEUM MARKETING LLC</b>	Transporter <b>HILAND CRUDE, LLC</b>
---	---

**TANK BATTERY**

Single Well Tank Battery Number :
-----------------------------------

**SALES INFORMATION**    This Is Not The First Sales

ESTIMATED BARRELS TO BE SOLD		ACTUAL BARRELS SOLD		DATE
5000	BBLS	299	BBLS	9/10/2013
	BBLS		BBLS	

**DETAILS**

Start Date	9/5/2013
Date Approved	9/5/2013
Approved By	<b>Jason Hicks</b>

Industrial Commission of North Dakota  
Oil and Gas Division

Verbal Approval To Purchase and Transport Oil

Well or Facility No

**22099**

Tight Hole Yes

**OPERATOR**

Operator

**OASIS PETROLEUM NORTH AMERICA LL**

Representative

**Cody Jeannotte**

Rep Phone

**(701) 577-1663**

**WELL INFORMATION**

Well Name

**YUKON 5301 41-12T**

Inspector

**Richard Dunn**

Well Location    QQ      Sec      Twp      Rng  
                  SWSW    12     153   N    101   W

County  
**MCKENZIE**

Footages      **255**      Feet From the S Line  
                  **710**      Feet From the W Line

Field  
**BAKER**  
Pool  
**BAKKEN**

Date of First Production Through Permanent Wellhead      **9/9/2013**      This Is Not The First Sales

**PURCHASER / TRANSPORTER**

Purchaser

**OASIS PETROLEUM MARKETING LLC**

Transporter

**HILAND CRUDE, LLC**

**TANK BATTERY**

Unit Tank Battery Number :

**SALES INFORMATION** This Is Not The First Sales

ESTIMATED BARRELS TO BE SOLD	ACTUAL BARRELS SOLD	DATE
15000	BBLS	299
	BBLS	BBLS

**DETAILS**

Must E-Mail or Call Inspector at 701-770-3554/rsdunn@nd.gov on first date of sales and report amount sold, date sold, and first date of production through the permanent wellhead. Must also forward Forms 6 & 8 to State prior to reaching 15000 Bbl estimate or no later than required time frame for submitting those forms.

Start Date	<b>9/5/2013</b>
Date Approved	<b>9/5/2013</b>
Approved By	<b>Richard Dunn</b>

**Industrial Commission of North Dakota  
Oil and Gas Division**

Well or Facility No  
**22099**

**Verbal Approval To Purchase and Transport Oil**

Tight Hole    Yes

**OPERATOR**

Operator <b>OASIS PETROLEUM NORTH AMERICA LL</b>	Representative <b>Cody Jeannotte</b>	Rep Phone <b>(701) 577-1663</b>
---	---	------------------------------------

**WELL INFORMATION**

Well Name <b>YUKON 5301 41-12T</b>	Inspector <b>Richard Dunn</b>
Well Location    QQ      Sec      Twp      Rng	County <b>MCKENZIE</b>
SWSW    12     153   N    101   W	Field <b>BAKER</b>
Footages      255      Feet From the S Line	Pool
710      Feet From the W Line	
Date of First Production Through Permanent Wellhead	<b>This Is Not The First Sales</b>

**PURCHASER / TRANSPORTER**

Purchaser <b>OASIS PETROLEUM MARKETING LLC</b>	Transporter <b>HILAND CRUDE, LLC</b>
---	---

**TANK BATTERY**

Unit Tank Battery Number :
----------------------------

**SALES INFORMATION**   **This Is Not The First Sales**

ESTIMATED BARRELS TO BE SOLD	ACTUAL BARRELS SOLD	DATE
15000	BBLS	
	BBLS	

**DETAILS**

Must E-Mail or Call Inspector at 701-770-3554/rsdunn@nd.gov on first date of sales and report amount sold, date sold, and first date of production through the permanent wellhead. Must also forward Forms 6 & 8 to State prior to reaching 15000 Bbl estimate or no later than required time frame for submitting those forms.

Start Date	<b>9/5/2013</b>
Date Approved	<b>9/5/2013</b>
Approved By	<b>Richard Dunn</b>

Industrial Commission of North Dakota  
Oil and Gas Division

*CH*  
Well or Facility No  
**22099**

Verbal Approval To Purchase and Transport Oil      Tight Hole      Yes

**OPERATOR**

Operator <b>OASIS PETROLEUM NORTH AMERICA LL</b>	Representative <b>Cody Jeannotte</b>	Rep Phone
---	---	-----------

**WELL INFORMATION**

Well Name <b>YUKON 5301 41-12T</b>	Inspector <b>Richard Dunn</b>
Well Location    QQ               Sec               Twp               Rng	County <b>MCKENZIE</b>
SWSW    12    153    N    101    W	Field <b>BAKER</b>
Footages            255      Feet From the S Line	Pool <b>BAKKEN</b>
710      Feet From the W Line	
Date of First Production Through Permanent Wellhead	<b>This Is Not The First Sales</b>

**PURCHASER / TRANSPORTER**

Purchaser	Transporter
-----------	-------------

**TANK BATTERY**

Single Well Tank Battery Number :
-----------------------------------

**SALES INFORMATION**   **This Is Not The First Sales**

ESTIMATED BARRELS TO BE SOLD	ACTUAL BARRELS SOLD	DATE
5000      BBLS	BBLS	9/4/2013
BBLS	BBLS	

**DETAILS**

--

Start Date <b>9/5/2013</b>
Date Approved <b>9/5/2013</b>
Approved By <b>Jason Hicks</b>



Scientific  
Drilling

7327 West Barton Road  
Casper, WY 82604  
(307)-472-6621 Fax (307) 472-5439

## Survey Certification

Operator	Oasis Petroleum
Well Name & No.	Yukon 5301 41-12T
County & State	McKenzie County, ND
SDI Job No.	410613K24158
Rig	Nabors B22
Survey Date	9-Jun-2013

I, Seth M. Burstad, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 0 feet to a measured depth of 2084.36 feet is true and correct as determined from all available records.

Seth Burstad

Signature

1-Aug-2013

Date

**Seth M. Burstad**

Rockies Region Well Planner  
Scientific Drilling - Rocky Mountain District

# Oasis Petroleum

McKenzie County, ND

Yukon

Yukon 5301 41-12T

OH

Design: OH

## Standard Survey Report

01 August, 2013



[www.scientificdrilling.com](http://www.scientificdrilling.com)



# Scientific Drilling International

## Survey Report

<b>Company:</b>	Oasis Petroleum	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	McKenzie County, ND	<b>TVD Reference:</b>	GL 2091' & KB 25' @ 2116.00ft (Nabors B22)
<b>Site:</b>	Yukon	<b>MD Reference:</b>	GL 2091' & KB 25' @ 2116.00ft (Nabors B22)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

<b>Project</b>	McKenzie County, ND		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	North Dakota Northern Zone		

<b>Site</b>	Yukon			
<b>Site Position:</b>		<b>Northing:</b>	400,602.69 usft	<b>Latitude:</b>
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,509,770.32 usft	<b>Longitude:</b>
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>

<b>Well</b>	Yukon 5301 41-12T, 255 FSL 650 FWL SEC 12 T153 R101				
<b>Well Position</b>	+N/S +E/W	0.00 ft 0.00 ft	<b>Northing:</b> <b>Easting:</b>	400,602.69 usft 1,509,770.32 usft	<b>Latitude:</b> <b>Longitude:</b>
<b>Position Uncertainty</b>		0.00 ft	<b>Slot Radius:</b>	ft	<b>Grid Convergence:</b>
			<b>Wellhead Elevation:</b>		<b>Ground Level:</b>

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b> (°)	<b>Dip Angle</b> (°)	<b>Field Strength</b> (nT)
	BGGM2013	6/9/2013	7.70	73.17	56,555

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>		<b>Depth From (TVD)</b> (ft)	<b>+N/S</b> (ft)	<b>+E/W</b> (ft)	<b>Direction</b> (°)
		0.00	0.00	0.00	74.00

<b>Survey Program</b>	<b>Date</b>	8/1/2013		
<b>From</b> (ft)	<b>To</b> (ft)	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
100.00	2,084.36	Survey #1 Surface Gyros (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.56	103.48	100.00	-0.11	0.48	0.43	0.56	0.56	0.00
<b>First SDI Gyro Survey</b>									
200.00	0.39	98.05	199.99	-0.28	1.29	1.16	0.18	-0.17	-5.43
300.00	0.27	113.40	299.99	-0.42	1.84	1.65	0.15	-0.12	15.35
400.00	0.23	170.63	399.99	-0.71	2.09	1.81	0.24	-0.04	57.23
500.00	0.22	103.52	499.99	-0.95	2.31	1.96	0.25	-0.01	-67.11
600.00	0.36	124.11	599.99	-1.17	2.76	2.33	0.17	0.14	20.59
700.00	0.20	225.13	699.99	-1.47	2.89	2.37	0.44	-0.16	101.02
800.00	0.15	310.16	799.99	-1.51	2.67	2.15	0.24	-0.05	85.03
900.00	0.11	131.92	899.99	-1.49	2.64	2.13	0.26	-0.04	-178.24

# Scientific Drilling International

## Survey Report

<b>Company:</b>	Oasis Petroleum	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	McKenzie County, ND	<b>TVD Reference:</b>	GL 2091' & KB 25' @ 2116.00ft (Nabors B22)
<b>Site:</b>	Yukon	<b>MD Reference:</b>	GL 2091' & KB 25' @ 2116.00ft (Nabors B22)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Casper District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
1,000.00	0.33	62.42	999.99	-1.42	2.97	2.46	0.31	0.22	-69.50	
1,100.00	0.29	257.16	1,099.99	-1.34	2.97	2.49	0.61	-0.04	-165.26	
1,200.00	0.25	299.61	1,199.99	-1.29	2.54	2.08	0.20	-0.04	42.45	
1,300.00	0.15	315.40	1,299.99	-1.09	2.26	1.87	0.11	-0.10	15.79	
1,400.00	0.14	352.34	1,399.99	-0.88	2.15	1.82	0.09	-0.01	36.94	
1,500.00	0.43	350.75	1,499.98	-0.39	2.07	1.89	0.29	0.29	-1.59	
1,600.00	0.19	37.01	1,599.98	0.12	2.11	2.06	0.33	-0.24	46.26	
1,700.00	0.38	43.81	1,699.98	0.49	2.44	2.48	0.19	0.19	6.80	
1,800.00	0.16	33.82	1,799.98	0.84	2.75	2.87	0.22	-0.22	-9.99	
1,900.00	0.13	219.92	1,899.98	0.87	2.75	2.89	0.29	-0.03	-173.90	
2,000.00	0.13	103.99	1,999.98	0.76	2.79	2.89	0.22	0.00	-115.93	
2,084.36	0.30	44.47	2,084.34	0.89	3.04	3.17	0.31	0.20	-70.55	
<b>Last SDI Gyro Survey</b>										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/S (ft)	+E/W (ft)	Comment	
100.00	100.00	-0.11	0.48	First SDI Gyro Survey	
2,084.36	2,084.34	0.89	3.04	Last SDI Gyro Survey	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



19510 Oil Center Blvd  
Houston, TX 77073  
Bus 281.443.1414  
Fax 281.443.1676

Friday, July 19, 2013

State of North Dakota

Subject: **Surveys**

Re: **Oasis**  
**Yukon 5301 41-12T**  
**McKenzie, ND**

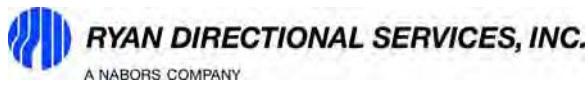
Enclosed, please find the original and one copy of the survey performed on the above-referenced well by Ryan Directional Services, Inc. (Operator #: ). Other information required by your office is as follows:

<b>Surveyor Name</b>	<b>Surveyor Title</b>	<b>Borehole Number</b>	<b>Start Depth</b>	<b>End Depth</b>	<b>Start Date</b>	<b>End Date</b>	<b>Type of Survey</b>	<i><b>TD Straight Line Projection</b></i>
McCammond, Mike	MWD Operator	O.H.	2084'	20461'	06/21/13	07/11/13	MWD	20574'
McCammond, Mike	MWD Operator	ST 1	20180'	21067'	07/14/13	07/16/13	MWD	21220'

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required please contact the undersigned at the letterhead address or phone number.

A handwritten signature in black ink that reads "Douglas Hudson".

**Douglas Hudson**  
Well Planner



19510 Oil Center Blvd  
Houston, TX 77073  
Bus 281.443.1414  
Fax 281.443.1676

Friday, July 19, 2013

State of North Dakota

Subject: **Survey Certification Letter**

Re: **Oasis**  
**Yukon 5301 41-12T**  
**McKenzie, ND**

I, Mike McCommend, certify that; I am employed by Ryan Directional Services, Inc.; that I did on the conduct or supervise the taking of the following MWD surveys:

on the day(s) of 6/21/2013 thru 7/11/2013 from a depth of 2084' MD to a depth of 20461' MD and Straight line projection to TD 20574' MD;

on the day(s) of 7/14/2013 thru 7/16/2013 from a depth of 20180' MD to a depth of 21067' MD and Straight line projection to TD 21220' MD;

that the data is true, correct, complete, and within the limitations of the tool as set forth by Ryan Directional Services, Inc.; that I am authorized and qualified to make this report; that this survey was conducted at the request of Oasis for the Yukon 5301 41-12T; in McKenzie, ND.

Mike McCommend

**Mike McCommend**

MWD Operator

Ryan Directional Services, Inc.

Report #: **1**  
Date: **21-Jun-13**



**RYAN DIRECTIONAL  
SERVICES**  
A NABORS COMPANY

Ryan Job # **6422**  
Kit # **45**

**SURVEY REPORT**

Customer: **Oasis Petroleum**  
Well Name: **Yukon 5301 41-12T**  
Block or Section: **153N-101W-13/24**  
Rig #: **Nabors B-22**  
Calculation Method: **Minimun Curvature Calculation**

MWD Operator: **M. McCommand/B. Alldaffer**  
Directional Drillers: **D. Bohn/D. Rakstad**  
Survey Corrected To: **True North**  
Vertical Section Direction: **176.8**  
Survey Correction: **8.35**  
Temperature Forecasting Model (Chart Only): **Logarithmic**

Survey #	MD	Inc	Azm	Temp	TVD	VS	N/S	E/W	DLS
<b>Tie in to Gyro Surveys</b>									
<b>Tie In</b>	<b>2084.36</b>	<b>0.30</b>	<b>44.47</b>		<b>2084.34</b>	<b>3.19</b>	<b>0.86</b>	<b>3.07</b>	<b>0.30</b>
1	2166	1.00	91.70	87.00	2165.97	-0.77	0.99	3.93	1.01
2	2259	1.20	101.40	89.00	2258.96	-0.46	0.77	5.70	0.29
3	2352	1.50	102.40	89.00	2351.93	0.12	0.32	7.84	0.32
4	2446	1.50	104.40	91.00	2445.90	0.82	-0.25	10.23	0.06
<b>5</b>	<b>2539</b>	<b>1.80</b>	<b>99.60</b>	<b>93.00</b>	<b>2538.86</b>	<b>1.51</b>	<b>-0.80</b>	<b>12.85</b>	<b>0.35</b>
6	2632	1.60	92.40	95.00	2631.82	1.96	-1.09	15.59	0.31
7	2725	1.80	93.50	96.00	2724.78	2.26	-1.24	18.35	0.22
8	2819	1.60	81.20	98.00	2818.74	2.30	-1.13	21.12	0.44
9	2912	1.20	358.20	102.00	2911.72	1.20	0.05	22.37	2.02
<b>10</b>	<b>3006</b>	<b>1.50</b>	<b>0.00</b>	<b>102.00</b>	<b>3005.69</b>	<b>-1.01</b>	<b>2.26</b>	<b>22.34</b>	<b>0.32</b>
11	3099	1.60	318.50	105.00	3098.66	-3.24	4.45	21.48	1.19
12	3192	2.00	316.80	107.00	3191.61	-5.51	6.60	19.51	0.43
13	3285	0.80	331.80	109.00	3284.59	-7.34	8.36	18.09	1.34
14	3379	0.40	10.60	111.00	3378.58	-8.25	9.26	17.84	0.58
<b>15</b>	<b>3472</b>	<b>0.50</b>	<b>341.20</b>	<b>113.00</b>	<b>3471.58</b>	<b>-8.96</b>	<b>9.96</b>	<b>17.77</b>	<b>0.27</b>
16	3565	0.50	352.10	114.00	3564.57	-9.75	10.75	17.58	0.10
17	3659	0.40	352.50	116.00	3658.57	-10.49	11.48	17.48	0.11
18	3752	0.40	1.10	116.00	3751.57	-11.14	12.13	17.45	0.06
19	3845	0.30	326.20	118.00	3844.57	-11.67	12.66	17.32	0.25
<b>20</b>	<b>3939</b>	<b>0.10</b>	<b>260.60</b>	<b>62.00</b>	<b>3938.57</b>	<b>-11.87</b>	<b>12.85</b>	<b>17.10</b>	<b>0.29</b>
21	4032	0.10	327.90	122.00	4031.57	-11.93	12.90	16.98	0.12
22	4126	0.20	269.50	122.00	4125.57	-12.01	12.97	16.77	0.18
23	4219	0.10	276.90	122.00	4218.57	-12.04	12.98	16.53	0.11
24	4312	0.30	333.80	123.00	4311.57	-12.27	13.21	16.34	0.28
<b>25</b>	<b>4406</b>	<b>0.20</b>	<b>355.60</b>	<b>127.00</b>	<b>4405.56</b>	<b>-12.66</b>	<b>13.59</b>	<b>16.22</b>	<b>0.15</b>
26	4499	1.10	187.50	127.00	4498.56	-11.95	12.87	16.09	1.39
27	4592	1.00	192.70	129.00	4591.54	-10.29	11.19	15.79	0.15
28	4686	0.90	226.90	132.00	4685.53	-9.03	9.89	15.07	0.60
29	4779	0.40	303.40	132.00	4778.53	-8.75	9.57	14.27	0.96
<b>30</b>	<b>4872</b>	<b>0.80</b>	<b>309.60</b>	<b>120.00</b>	<b>4871.52</b>	<b>-9.39</b>	<b>10.16</b>	<b>13.50</b>	<b>0.44</b>
31	4965	0.50	301.90	134.00	4964.52	-10.06	10.79	12.65	0.34
32	5058	0.10	294.80	136.00	5057.51	-10.34	11.04	12.23	0.43
33	5151	0.10	199.90	136.00	5150.51	-10.30	10.99	12.13	0.16
34	5244	1.80	187.60	141.00	5243.50	-8.79	9.47	11.91	1.83
<b>35</b>	<b>5338</b>	<b>2.00</b>	<b>176.20</b>	<b>141.00</b>	<b>5337.45</b>	<b>-5.70</b>	<b>6.37</b>	<b>11.83</b>	<b>0.45</b>
36	5431	1.50	164.90	143.00	5430.40	-2.88	3.57	12.25	0.65
37	5524	1.10	164.70	145.00	5523.38	-0.82	1.54	12.80	0.43
38	5618	1.30	169.20	145.00	5617.36	1.12	-0.38	13.24	0.24
39	5711	1.70	166.10	147.00	5710.33	3.52	-2.76	13.77	0.44
<b>40</b>	<b>5804</b>	<b>1.50</b>	<b>169.70</b>	<b>150.00</b>	<b>5803.29</b>	<b>6.08</b>	<b>-5.29</b>	<b>14.32</b>	<b>0.24</b>
41	5898	1.50	182.40	150.00	5897.26	8.53	-7.73	14.49	0.35
42	5991	1.70	177.80	152.00	5990.22	11.12	-10.33	14.49	0.26
43	6084	1.60	176.10	154.00	6083.18	13.80	-13.00	14.63	0.12
44	6178	1.30	173.00	154.00	6177.15	16.17	-15.37	14.85	0.33
<b>45</b>	<b>6271</b>	<b>1.60</b>	<b>167.80</b>	<b>158.00</b>	<b>6270.12</b>	<b>18.51</b>	<b>-17.68</b>	<b>15.25</b>	<b>0.35</b>
46	6364	2.70	154.20	154.00	6363.06	21.81	-20.93	16.48	1.30
47	6458	2.00	151.50	154.00	6456.98	25.34	-24.36	18.23	0.75
48	6551	1.20	160.10	149.00	6549.94	27.74	-26.70	19.33	0.90
49	6644	2.00	159.30	152.00	6642.90	30.22	-29.14	20.24	0.86
<b>50</b>	<b>6737</b>	<b>1.60</b>	<b>164.60</b>	<b>147.00</b>	<b>6735.86</b>	<b>33.04</b>	<b>-31.91</b>	<b>21.16</b>	<b>0.47</b>
51	6830	1.00	146.20	149.00	6828.83	35.00	-33.83	21.95	0.78
52	6924	1.00	139.20	154.00	6922.82	36.36	-35.13	22.94	0.13
53	7017	0.50	72.00	158.00	7015.81	36.90	-35.62	23.86	1.00
54	7110	0.80	61.10	161.00	7108.81	36.51	-35.18	24.82	0.35
<b>55</b>	<b>7204</b>	<b>0.80</b>	<b>49.80</b>	<b>165.00</b>	<b>7202.80</b>	<b>35.83</b>	<b>-34.44</b>	<b>25.89</b>	<b>0.17</b>
56	7298	1.00	45.80	161.00	7296.79	34.90	-33.45	26.98	0.22
57	7391	0.80	57.30	167.00	7389.77	34.05	-32.53	28.11	0.29
58	7484	1.00	62.00	170.00	7482.76	33.39	-31.80	29.37	0.23
59	7577	0.80	66.20	167.00	7575.75	32.82	-31.16	30.68	0.23
<b>60</b>	<b>7671</b>	<b>0.90</b>	<b>21.00</b>	<b>170.00</b>	<b>7669.74</b>	<b>31.92</b>	<b>-30.20</b>	<b>31.55</b>	<b>0.70</b>
61	7764	1.00	328.10	174.00	7762.73	30.54	-28.83	31.38	0.92
62	7857	1.60	325.50	177.00	7855.71	28.72	-27.07	30.22	0.65
63	7950	1.50	320.00	177.00	7948.67	26.63	-25.07	28.70	0.19
64	8044	1.90	323.30	179.00	8042.63	24.35	-22.88	26.98	0.44
<b>65</b>	<b>8137</b>	<b>1.70</b>	<b>327.50</b>	<b>183.00</b>	<b>8135.58</b>	<b>21.86</b>	<b>-20.48</b>	<b>25.31</b>	<b>0.26</b>

Report #: **1**  
Date: **21-Jun-13**



**RYAN DIRECTIONAL  
SERVICES**  
A NABORS COMPANY

Ryan Job # **6422**  
Kit # **45**

**SURVEY REPORT**

Customer: **Oasis Petroleum**  
Well Name: **Yukon 5301 41-12T**  
Block or Section: **153N-101W-13/24**  
Rig #: **Nabors B-22**  
Calculation Method: **Minimun Curvature Calculation**

MWD Operator: **M. McCommand/B. Alldaffer**  
Directional Drillers: **D. Bohn/D. Rakstad**  
Survey Corrected To: **True North**  
Vertical Section Direction: **176.8**  
Survey Correction: **8.35**  
Temperature Forecasting Model (Chart Only): **Logarithmic**

Survey #	MD	Inc	Azm	Temp	TVD	VS	N/S	E/W	DLS
66	8230	1.40	322.50	183.00	8228.55	19.72	-18.41	23.88	0.35
67	8323	1.20	313.90	185.00	8321.53	18.07	-16.84	22.49	0.30
68	8417	1.20	319.40	186.00	8415.51	16.56	-15.41	21.14	0.12
69	8510	1.30	319.60	186.00	8508.48	14.95	-13.86	19.82	0.11
<b>70</b>	<b>8603</b>	<b>1.60</b>	<b>318.30</b>	<b>188.00</b>	<b>8601.45</b>	<b>13.09</b>	<b>-12.09</b>	<b>18.27</b>	<b>0.32</b>
71	8696	1.80	323.30	188.00	8694.41	10.86	-9.95	16.54	0.27
72	8790	1.30	321.50	190.00	8788.38	8.76	-7.93	14.99	0.53
73	8883	0.80	308.10	192.00	8881.36	7.47	-6.71	13.82	0.60
74	8976	0.90	322.00	195.00	8974.35	6.44	-5.73	12.86	0.25
<b>75</b>	<b>9070</b>	<b>1.20</b>	<b>325.90</b>	<b>199.00</b>	<b>9068.34</b>	<b>4.99</b>	<b>-4.33</b>	<b>11.85</b>	<b>0.33</b>
76	9163	0.50	310.80	199.00	9161.33	3.87	-3.26	11.00	0.78
77	9256	0.30	307.10	201.00	9254.32	3.43	-2.85	10.50	0.22
78	9356	0.20	271.70	197.00	9354.32	3.25	-2.69	10.12	0.18
79	9443	0.30	308.70	201.00	9441.32	3.08	-2.54	9.79	0.21
<b>80</b>	<b>9536</b>	<b>0.40</b>	<b>304.10</b>	<b>204.00</b>	<b>9534.32</b>	<b>2.72</b>	<b>-2.21</b>	<b>9.33</b>	<b>0.11</b>
81	9629	0.40	308.40	206.00	9627.32	2.31	-1.82	8.81	0.03
82	9723	0.30	304.40	206.00	9721.32	1.94	-1.48	8.35	0.11
83	9816	0.50	276.50	208.00	9814.31	1.73	-1.30	7.74	0.29
84	9909	0.30	277.50	206.00	9907.31	1.61	-1.22	7.10	0.22
<b>85</b>	<b>10003</b>	<b>0.30</b>	<b>303.40</b>	<b>212.00</b>	<b>10001.31</b>	<b>1.42</b>	<b>-1.05</b>	<b>6.65</b>	<b>0.14</b>
86	10096	0.50	325.00	212.00	10094.31	0.93	-0.58	6.21	0.27
<b>87</b>	<b>10189</b>	<b>0.70</b>	<b>335.60</b>	<b>213.00</b>	<b>10187.30</b>	<b>0.06</b>	<b>0.27</b>	<b>5.74</b>	<b>0.25</b>
88	10250	0.80	334.30	213.00	10248.30	-0.69	0.99	5.41	0.17
89	10286	0.70	334.90	192.00	10284.29	-1.12	1.41	5.20	0.28
<b>90</b>	<b>10317</b>	<b>0.50</b>	<b>330.10</b>	<b>194.00</b>	<b>10315.29</b>	<b>-1.42</b>	<b>1.70</b>	<b>5.06</b>	<b>0.66</b>
91	10348	1.80	157.40	194.00	10346.29	-1.08	1.37	5.17	7.41
92	10379	5.90	163.70	192.00	10377.21	0.93	-0.61	5.81	13.28
93	10410	10.20	161.00	194.00	10407.90	5.13	-4.74	7.15	13.92
94	10441	14.50	161.00	195.00	10438.18	11.51	-11.00	9.31	13.87
<b>95</b>	<b>10472</b>	<b>17.90</b>	<b>160.60</b>	<b>195.00</b>	<b>10467.94</b>	<b>19.82</b>	<b>-19.17</b>	<b>12.16</b>	<b>10.97</b>
96	10503	21.50	156.00	197.00	10497.12	29.71	-28.86	16.05	12.64
97	10535	24.60	151.20	197.00	10526.57	41.20	-40.05	21.65	11.32
98	10566	27.20	147.60	199.00	10554.45	53.21	-51.69	28.55	9.80
99	10597	30.70	147.50	199.00	10581.57	66.30	-64.35	36.60	11.29
<b>100</b>	<b>10628</b>	<b>34.30</b>	<b>150.70</b>	<b>199.00</b>	<b>10607.72</b>	<b>81.05</b>	<b>-78.65</b>	<b>45.13</b>	<b>12.87</b>
101	10659	38.00	154.10	199.00	10632.75	97.70	-94.86	53.58	13.57
102	10690	41.20	157.10	201.00	10656.63	116.12	-112.85	61.72	12.02
103	10721	45.40	158.60	201.00	10679.19	136.23	-132.54	69.73	13.95
104	10752	49.60	159.60	201.00	10700.13	158.00	-153.89	77.87	13.76
<b>105</b>	<b>10784</b>	<b>54.50</b>	<b>160.00</b>	<b>203.00</b>	<b>10719.80</b>	<b>182.12</b>	<b>-177.57</b>	<b>86.58</b>	<b>15.34</b>
106	10815	59.20	159.40	203.00	10736.75	206.92	-201.90	95.59	15.25
107	10846	63.70	158.70	203.00	10751.56	232.85	-227.32	105.32	14.65
108	10877	69.60	157.90	203.00	10763.84	259.83	-253.75	115.85	19.18
109	10908	73.80	156.90	204.00	10773.57	287.58	-280.92	127.16	13.89
<b>110</b>	<b>10939</b>	<b>74.60</b>	<b>156.40</b>	<b>204.00</b>	<b>10782.01</b>	<b>315.58</b>	<b>-308.30</b>	<b>138.98</b>	<b>3.01</b>
111	10970	77.80	156.90	206.00	10789.41	343.84	-335.94	150.91	10.44
112	11001	82.00	156.30	208.00	10794.84	372.48	-363.94	163.03	13.68
113	11032	83.20	156.40	206.00	10798.84	401.28	-392.10	175.36	3.88
114	11063	86.20	155.10	208.00	10801.70	430.08	-420.24	188.04	10.54
<b>115</b>	<b>11095</b>	<b>89.50</b>	<b>154.00</b>	<b>208.00</b>	<b>10802.90</b>	<b>459.68</b>	<b>-449.11</b>	<b>201.78</b>	<b>10.87</b>
116	11126	89.90	153.20	210.00	10803.06	488.17	-476.88	215.56	2.89
<b>117</b>	<b>11195</b>	<b>90.50</b>	<b>149.60</b>	<b>210.00</b>	<b>10802.82</b>	<b>550.49</b>	<b>-537.45</b>	<b>248.58</b>	<b>5.29</b>
118	11226	90.40	149.10	206.00	10802.58	578.00	-564.12	264.39	1.64
119	11257	90.20	151.00	208.00	10802.41	605.68	-590.98	279.86	6.16
<b>120</b>	<b>11291</b>	<b>90.10</b>	<b>151.60</b>	<b>208.00</b>	<b>10802.33</b>	<b>636.36</b>	<b>-620.80</b>	<b>296.19</b>	<b>1.79</b>
121	11323	90.40	151.20	208.00	10802.19	665.27	-648.89	311.51	1.56
122	11354	90.00	151.90	206.00	10802.08	693.31	-676.15	326.27	2.60
123	11385	88.60	153.50	204.00	10802.46	721.60	-703.69	340.49	6.86
124	11416	86.80	155.20	204.00	10803.70	750.23	-731.61	353.90	7.98
<b>125</b>	<b>11446</b>	<b>86.90</b>	<b>156.90</b>	<b>204.00</b>	<b>10805.35</b>	<b>778.24</b>	<b>-758.99</b>	<b>366.06</b>	<b>5.67</b>
126	11476	87.20	158.50	206.00	10806.89	806.55	-786.71	377.43	5.42
127	11506	87.30	160.30	208.00	10808.33	835.14	-814.75	387.97	6.00
128	11536	87.90	161.50	208.00	10809.59	863.97	-843.08	397.78	4.47
129	11567	88.00	161.70	210.00	10810.70	893.86	-872.47	407.56	0.72
<b>130</b>	<b>11598</b>	<b>88.60</b>	<b>161.50</b>	<b>210.00</b>	<b>10811.62</b>	<b>923.77</b>	<b>-901.88</b>	<b>417.34</b>	<b>2.04</b>

Report #: 1  
Date: 21-Jun-13



**RYAN DIRECTIONAL  
SERVICES**  
A NABORS COMPANY

Ryan Job # 6422  
Kit # 45

**SURVEY REPORT**

Customer: Oasis Petroleum  
Well Name: Yukon 5301 41-12T  
Block or Section: 153N-101W-13/24  
Rig #: Nabors B-22  
Calculation Method: Minimun Curvature Calculation

MWD Operator: M. McCommand/B. Alldaffer  
Directional Drillers: D. Bohn/D. Rakstad  
Survey Corrected To: True North  
Vertical Section Direction: 176.8  
Survey Correction: 8.35  
Temperature Forecasting Model (Chart Only): Logarithmic

Survey #	MD	Inc	Azm	Temp	TVD	VS	N/S	E/W	DLS
131	11630	89.50	162.80	210.00	10812.15	954.72	-932.33	427.14	4.94
132	11660	90.20	162.90	210.00	10812.23	983.84	-961.00	435.99	2.36
133	11690	90.60	162.80	212.00	10812.02	1012.95	-989.66	444.84	1.37
134	11722	90.60	164.30	212.00	10811.68	1044.10	-1020.35	453.90	4.69
135	11752	<b>90.40</b>	<b>165.00</b>	<b>212.00</b>	<b>10811.42</b>	<b>1073.42</b>	<b>-1049.28</b>	<b>461.84</b>	<b>2.43</b>
136	11784	91.00	165.20	213.00	10811.03	1104.75	-1080.20	470.06	1.98
137	11815	91.20	166.70	213.00	10810.43	1135.19	-1110.27	477.59	4.88
138	11847	91.00	167.40	212.00	10809.82	1166.73	-1141.45	484.76	2.27
139	11878	89.90	166.30	212.00	10809.58	1197.26	-1171.63	491.81	5.02
140	11908	<b>86.90</b>	<b>166.60</b>	<b>212.00</b>	<b>10810.41</b>	<b>1226.75</b>	<b>-1200.78</b>	<b>498.84</b>	<b>10.05</b>
141	11939	86.20	168.10	212.00	10812.28	1257.28	-1230.97	505.61	5.33
142	11970	87.30	168.60	212.00	10814.04	1287.89	-1261.28	511.86	3.90
143	12000	88.10	169.60	213.00	10815.24	1317.60	-1290.72	517.53	4.27
144	12031	88.20	170.10	215.00	10816.24	1348.35	-1321.22	522.99	1.64
145	12062	<b>88.00</b>	<b>170.10</b>	<b>215.00</b>	<b>10817.27</b>	<b>1379.12</b>	<b>-1351.74</b>	<b>528.32</b>	<b>0.65</b>
146	12094	88.20	170.50	215.00	10818.33	1410.90	-1383.26	533.71	1.40
147	12124	88.20	171.70	215.00	10819.27	1440.74	-1412.89	538.35	4.00
148	12155	88.30	172.30	217.00	10820.22	1471.61	-1443.57	542.66	1.96
149	12186	88.80	174.10	217.00	10821.00	1502.54	-1474.34	546.33	6.02
150	12217	<b>89.00</b>	<b>174.90</b>	<b>217.00</b>	<b>10821.60</b>	<b>1533.51</b>	<b>-1505.19</b>	<b>549.30</b>	<b>2.66</b>
151	12249	89.10	175.40	217.00	10822.13	1565.49	-1537.08	552.00	1.59
152	12279	88.60	177.30	217.00	10822.73	1595.48	-1567.01	553.91	6.55
153	12309	89.10	178.30	217.00	10823.33	1625.47	-1596.98	555.06	3.73
154	12340	89.40	178.70	219.00	10823.74	1656.46	-1627.96	555.87	1.61
155	12372	<b>89.50</b>	<b>178.70</b>	<b>192.00</b>	<b>10824.05</b>	<b>1688.44</b>	<b>-1659.96</b>	<b>556.60</b>	<b>0.31</b>
156	12403	88.80	179.20	219.00	10824.51	1719.41	-1690.95	557.17	2.77
157	12497	89.30	179.80	221.00	10826.07	1813.29	-1784.93	557.99	0.83
158	12590	90.20	180.70	224.00	10826.47	1906.12	-1877.93	557.58	1.37
159	12683	90.70	180.60	224.00	10825.74	1998.91	-1970.92	556.53	0.55
160	12779	<b>89.90</b>	<b>179.90</b>	<b>226.00</b>	<b>10825.24</b>	<b>2094.73</b>	<b>-2066.91</b>	<b>556.11</b>	<b>1.11</b>
161	12873	89.10	179.70	228.00	10826.06	2188.60	-2160.91	556.44	0.88
162	12967	87.30	179.70	228.00	10829.01	2282.43	-2254.86	556.93	1.91
163	13061	88.00	179.30	228.00	10832.87	2376.24	-2348.77	557.75	0.86
164	13154	88.00	179.30	230.00	10836.11	2469.10	-2441.71	558.88	0.00
165	13248	<b>88.20</b>	<b>179.60</b>	<b>230.00</b>	<b>10839.23</b>	<b>2562.95</b>	<b>-2535.65</b>	<b>559.79</b>	<b>0.38</b>
166	13342	87.40	179.50	231.00	10842.84	2656.77	-2629.58	560.52	0.86
167	13435	88.20	179.30	230.00	10846.41	2749.60	-2722.51	561.50	0.89
168	13529	88.70	178.20	231.00	10848.95	2843.51	-2816.45	563.55	1.29
169	13623	89.80	178.10	235.00	10850.18	2937.48	-2910.39	566.58	1.18
170	13717	<b>89.80</b>	<b>178.10</b>	<b>235.00</b>	<b>10850.51</b>	<b>3031.45</b>	<b>-3004.34</b>	<b>569.70</b>	<b>0.00</b>
171	13810	90.40	180.20	231.00	10850.35	3124.37	-3097.32	571.08	2.35
172	13904	91.20	179.20	233.00	10849.03	3218.24	-3191.31	571.57	1.36
173	13998	90.70	179.00	233.00	10847.47	3312.15	-3285.28	573.05	0.57
174	14091	90.50	179.80	233.00	10846.50	3405.05	-3378.27	574.02	0.89
175	14185	<b>90.30</b>	<b>181.50</b>	<b>233.00</b>	<b>10845.84</b>	<b>3498.83</b>	<b>-3472.26</b>	<b>572.95</b>	<b>1.82</b>
176	14279	90.90	181.90	237.00	10844.86	3592.48	-3566.21	570.16	0.77
177	14373	91.50	181.90	237.00	10842.89	3686.09	-3660.14	567.05	0.64
178	14466	90.50	181.90	237.00	10841.27	3778.70	-3753.07	563.97	1.08
179	14560	90.10	181.40	237.00	10840.78	3872.36	-3847.03	561.26	0.68
180	14654	<b>90.70</b>	<b>180.00</b>	<b>237.00</b>	<b>10840.12</b>	<b>3966.14</b>	<b>-3941.02</b>	<b>560.11</b>	<b>1.62</b>
181	14747	90.50	180.70	239.00	10839.15	4058.96	-4034.01	559.54	0.78
182	14841	89.10	180.90	237.00	10839.47	4152.73	-4128.00	558.23	1.50
183	14935	89.10	179.50	239.00	10840.95	4246.55	-4221.99	557.90	1.49
184	15029	89.20	179.00	240.00	10842.34	4340.45	-4315.97	559.13	0.54
185	15123	<b>90.90</b>	<b>179.00</b>	<b>239.00</b>	<b>10842.26</b>	<b>4434.38</b>	<b>-4409.95</b>	<b>560.77</b>	<b>1.81</b>
186	15216	90.20	177.80	240.00	10841.37	4527.33	-4502.91	563.37	1.49
187	15310	91.20	177.40	242.00	10840.22	4621.32	-4596.82	567.31	1.15
188	15404	90.60	179.40	240.00	10838.74	4715.26	-4690.76	569.93	2.22
189	15498	89.00	177.10	242.00	10839.07	4809.22	-4784.71	572.80	2.98
190	15591	<b>89.30</b>	<b>178.80</b>	<b>240.00</b>	<b>10840.45</b>	<b>4902.19</b>	<b>-4877.64</b>	<b>576.13</b>	<b>1.86</b>
191	15685	90.00	179.20	242.00	10841.03	4996.12	-4971.62	577.77	0.86
192	15779	90.20	178.90	242.00	10840.86	5090.05	-5065.61	579.33	0.38
193	15872	91.20	178.60	242.00	10839.73	5182.98	-5158.58	581.35	1.12
194	15966	92.00	177.90	244.00	10837.10	5276.92	-5252.49	584.22	1.13
195	16059	<b>90.60</b>	<b>179.00</b>	<b>242.00</b>	<b>10834.99</b>	<b>5369.85</b>	<b>-5345.43</b>	<b>586.74</b>	<b>1.91</b>

Report #: **1**  
Date: **21-Jun-13**



**RYAN DIRECTIONAL  
SERVICES**  
A NABORS COMPANY

Ryan Job # **6422**  
Kit # **45**

**SURVEY REPORT**

Customer: **Oasis Petroleum**  
Well Name: **Yukon 5301 41-12T**  
Block or Section: **153N-101W-13/24**  
Rig #: **Nabors B-22**  
Calculation Method: **Minimun Curvature Calculation**

MWD Operator: **M. McCommand/B. Alldaffer**  
Directional Drillers: **D. Bohn/D. Rakstad**  
Survey Corrected To: **True North**  
Vertical Section Direction: **176.8**  
Survey Correction: **8.35**  
Temperature Forecasting Model (Chart Only): **Logarithmic**

Survey #	MD	Inc	Azm	Temp	TVD	VS	N/S	E/W	DLS
196	16153	91.00	178.70	244.00	10833.68	5463.78	-5439.40	588.62	0.53
197	16247	91.80	178.70	246.00	10831.38	5557.70	-5533.35	590.76	0.85
198	16340	90.90	179.10	244.00	10829.19	5650.61	-5626.31	592.54	1.06
199	16434	90.20	179.80	246.00	10828.29	5744.50	-5720.30	593.44	1.05
<b>200</b>	<b>16528</b>	<b>89.20</b>	<b>179.40</b>	<b>249.00</b>	<b>10828.78</b>	<b>5838.39</b>	<b>-5814.29</b>	<b>594.10</b>	<b>1.15</b>
201	16621	90.50	180.80	248.00	10829.03	5931.23	-5907.29	593.94	2.05
202	16715	91.10	180.10	248.00	10827.71	6025.03	-6001.27	593.20	0.98
203	16808	90.30	179.10	248.00	10826.58	6117.91	-6094.26	593.85	1.38
204	16902	89.40	178.60	249.00	10826.82	6211.85	-6188.24	595.73	1.10
<b>205</b>	<b>16996</b>	<b>89.70</b>	<b>178.80</b>	<b>249.00</b>	<b>10827.56</b>	<b>6305.79</b>	<b>-6282.22</b>	<b>597.87</b>	<b>0.38</b>
206	17090	90.00	178.90	248.00	10827.81	6399.73	-6376.20	599.75	0.34
207	17183	89.70	180.40	248.00	10828.05	6492.61	-6469.19	600.32	1.64
208	17277	90.90	180.70	249.00	10827.56	6586.41	-6563.18	599.42	1.32
209	17370	90.80	181.00	249.00	10826.18	6679.17	-6656.16	598.04	0.34
<b>210</b>	<b>17464</b>	<b>90.70</b>	<b>181.10</b>	<b>251.00</b>	<b>10824.95</b>	<b>6772.90</b>	<b>-6750.14</b>	<b>596.32</b>	<b>0.15</b>
211	17558	90.20	180.90	251.00	10824.21	6866.65	-6844.12	594.68	0.57
212	17651	90.40	180.70	251.00	10823.72	6959.42	-6937.11	593.38	0.30
213	17745	90.40	180.70	248.00	10823.07	7053.20	-7031.10	592.23	0.00
214	17839	91.40	180.10	251.00	10821.59	7147.00	-7125.09	591.57	1.24
<b>215</b>	<b>17932</b>	<b>90.90</b>	<b>179.60</b>	<b>251.00</b>	<b>10819.72</b>	<b>7239.85</b>	<b>-7218.07</b>	<b>591.82</b>	<b>0.76</b>
216	18026	91.30	180.90	249.00	10817.92	7333.66	-7312.05	591.41	1.45
<b>217</b>	<b>18120</b>	<b>91.30</b>	<b>181.00</b>	<b>251.00</b>	<b>10815.79</b>	<b>7427.39</b>	<b>-7406.01</b>	<b>589.85</b>	<b>0.11</b>
218	18213	91.30	180.60	251.00	10813.68	7520.14	-7498.98	588.55	0.43
219	18307	91.50	181.00	251.00	10811.38	7613.88	-7592.94	587.24	0.48
<b>220</b>	<b>18400</b>	<b>91.60</b>	<b>179.80</b>	<b>251.00</b>	<b>10808.86</b>	<b>7706.66</b>	<b>-7685.90</b>	<b>586.59</b>	<b>1.29</b>
221	18494	92.00	178.90	251.00	10805.91	7800.52	-7779.85	587.66	1.05
222	18587	91.30	178.90	253.00	10803.23	7893.42	-7872.79	589.44	0.75
223	18681	91.50	181.10	251.00	10800.94	7987.24	-7966.76	589.44	2.35
224	18775	91.00	179.90	251.00	10798.89	8081.02	-8060.73	588.62	1.38
<b>225</b>	<b>18868</b>	<b>90.50</b>	<b>180.40</b>	<b>253.00</b>	<b>10797.67</b>	<b>8173.85</b>	<b>-8153.72</b>	<b>588.38</b>	<b>0.76</b>
226	18962	90.70	180.50	253.00	10796.68	8267.65	-8247.71	587.64	0.24
227	19056	90.40	179.60	251.00	10795.78	8361.50	-8341.71	587.56	1.01
228	19149	91.50	179.80	251.00	10794.24	8454.36	-8434.69	588.04	1.20
229	19243	91.70	180.00	253.00	10791.62	8548.19	-8528.65	588.21	0.30
<b>230</b>	<b>19337</b>	<b>92.00</b>	<b>178.60</b>	<b>253.00</b>	<b>10788.58</b>	<b>8642.05</b>	<b>-8622.60</b>	<b>589.36</b>	<b>1.52</b>
231	19430	91.40	177.80	253.00	10785.82	8734.98	-8715.51	592.28	1.07
<b>232</b>	<b>19524</b>	<b>91.70</b>	<b>178.40</b>	<b>251.00</b>	<b>10783.28</b>	<b>8828.92</b>	<b>-8809.42</b>	<b>595.39</b>	<b>0.71</b>
233	19618	90.40	179.20	251.00	10781.56	8922.84	-8903.38	597.36	1.62
234	19712	90.20	179.60	253.00	10781.06	9016.75	-8997.38	598.34	0.48
<b>235</b>	<b>19805</b>	<b>91.00</b>	<b>179.00</b>	<b>253.00</b>	<b>10780.09</b>	<b>9109.65</b>	<b>-9090.36</b>	<b>599.48</b>	<b>1.08</b>
236	19899	92.10	179.60	253.00	10777.55	9203.53	-9184.32	600.63	1.33
237	19993	92.60	179.60	255.00	10773.69	9297.33	-9278.24	601.28	0.53
238	20086	92.80	180.50	253.00	10769.31	9390.08	-9371.13	601.20	0.99
239	20180	90.40	181.10	253.00	10766.69	9483.81	-9465.08	599.89	2.63
<b>240</b>	<b>20274</b>	<b>90.70</b>	<b>181.50</b>	<b>255.00</b>	<b>10765.79</b>	<b>9577.51</b>	<b>-9559.05</b>	<b>597.76</b>	<b>0.53</b>
241	20367	91.80	180.70	257.00	10763.76	9670.23	-9652.01	595.97	1.46
242	20461	91.20	180.50	255.00	10761.30	9763.99	-9745.97	594.99	0.67
Projection	20574	91.20	180.50	271.00	10758.93	9876.73	-9858.94	594.00	0.00

Report #: 2



**RYAN DIRECTIONAL  
SERVICES**  
A NABORS COMPANY  
**SURVEY REPORT**

Ryan Job # 6422

Customer: **Oasis Petroleum**  
Well Name: **Yukon 5301 41-12T**  
Block or Section: **153N-101W-13/24**  
Rig #: **Nabors B-22**  
Calculation Method: **Minimum Curvature Calculation**

MWD Operator: **M McCommand/B Alldaffer**  
Directional Drillers: **D Bohn/D Rakstad**  
Survey Corrected To: **True North**  
Vertical Section Direction: **176.8**  
Survey Correction: **8.35**  
Forecasting Model (Chart Only): **Logarithmic**



# SUNDRY NOTICES AND REPORTS ON WELLS - FORM 4

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.  
**222100-01**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.



<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>October 1, 2013</b>
<input type="checkbox"/> Report of Work Done	Date Work Completed
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date

<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
<input checked="" type="checkbox"/> Other	<b>Central production facility-commingle prod</b>

**Well Name and Number  
(see details)**

Footages	F	L	F	L	Qtr-Qtr	Section	Township	Range
						<b>12</b>	<b>153 N</b>	<b>101 W</b>
Field	Pool <b>Bakken</b>					County	<b>McKenzie</b>	
<b>Baker</b>								

**24-HOUR PRODUCTION RATE**

Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

**DETAILS OF WORK**

Oasis Petroleum North America LLC requests permission to add the following wells to CTB # 222100-01.

Well File #22740 Larry 5301 44-12B SESE 12-153-101 API 33-053-04981

Well File #22099 Yukon 5301 41-12T SWSW 12-153-101 API 33-053-03911

Well File #25571 Colville 5301 44-12T SESE 12-153-101 API 33-053-04981

Well File #22221 Innoko 5301 43-12T SWSE 12-153-101 API 33-053-03937

The following wells are currently being commingled in the subject CTB:

Well File #22100 Achilles 5301 41-12B SWSW 12-153-101 API 33-053-03912

Well File #22220 Jefferies 5301 43-12B SWSE 12-153-101 API 33-053-03936

Well File #20864 Bray 5301 43-12H SWSE 12-153-101 API 33-053-03609

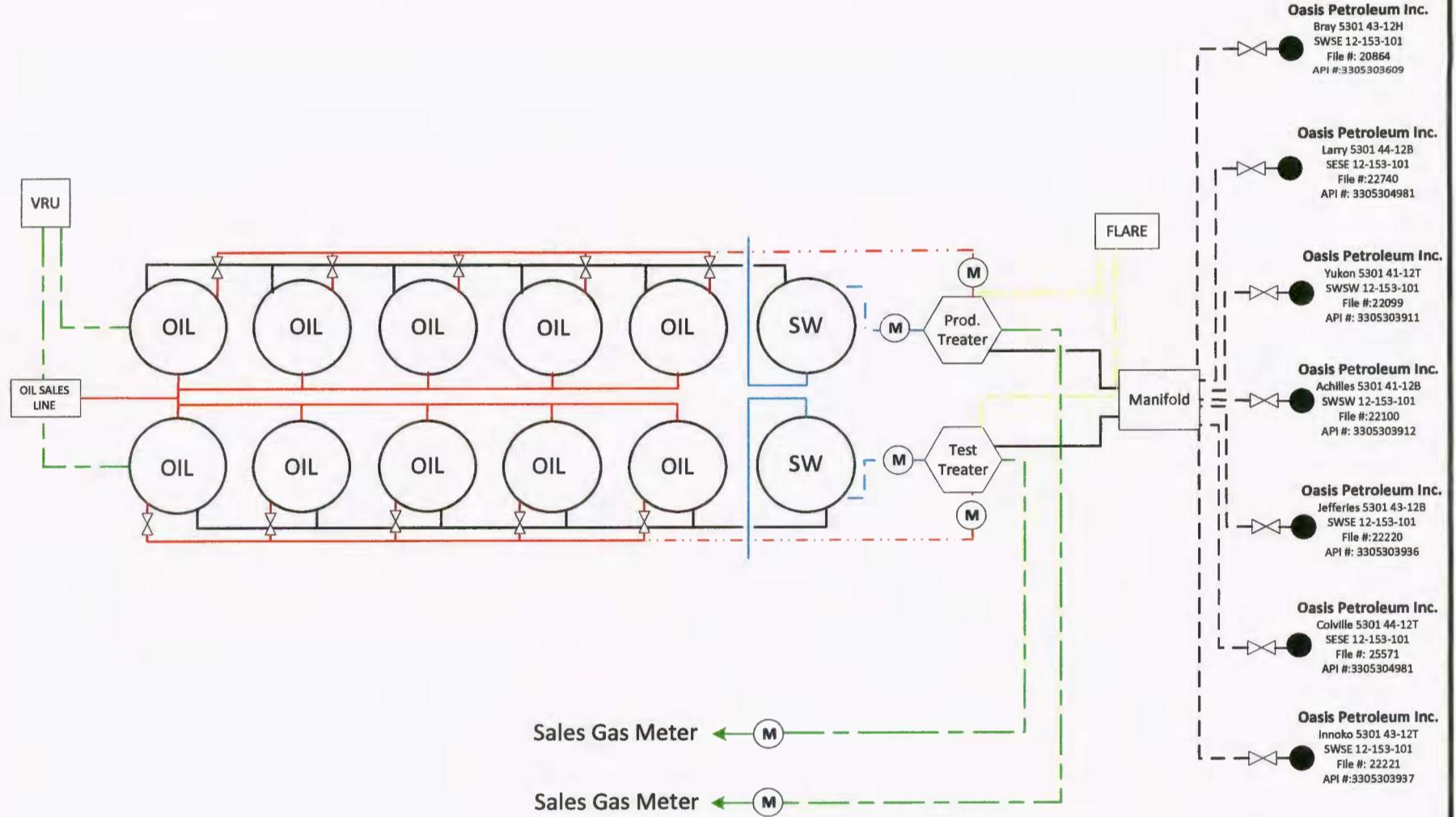
Well File #22740 Larry 5301 44-12B SESE 12-153-101 API 33-053-04071

Please find the following attachments: 1. A schematic drawing of the facility which diagrams the testing, treating, routing, and transferring of production. 2. A plat showing the location of the central facility 3. Affidavit of title indicating common ownership.

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9491</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Brandi Terry</b>	
Title <b>Regulatory Specialist</b>	Date <b>July 24, 2013</b>	
Email Address <b>bterry@oasispetroleum.com</b>		

**FOR STATE USE ONLY**

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>7-30-13</b>	
By <b>ORIGINAL SIGNED BY</b>	
Title <b>DARYL GRONFUR</b>	
Title <b>METER SPECIALIST</b>	



<b>OASIS</b> PETROLEUM					
5301 13-24 ACHILLES CENTRAL TANK BATTERY					
DATE <b>JULY 23, 2013</b>	REV. <b>0</b>	BY <b>LEE</b>	APPR. <b>NA</b>	SCALE <b>NA</b>	
LOCATION <b>NORTH DAKOTA</b>	FIELD <b>BAKER</b>				

# COMMINGLING AFFIDAVIT

STATE OF NORTH DAKOTA      )  
                                ) ss.  
COUNTY OF MCKENZIE        )

Tom F. Hawkins, being duly sworn, states as follows:

1. I am the Vice President - Land and Contracts employed by Oasis Petroleum North America LLC with responsibilities in the State of North Dakota and I have personal knowledge of the matters set forth in this affidavit.

2. Sections 13 and 24, Township 153 North, Range 101 West, 5<sup>th</sup> P.M., McKenzie County, North Dakota constitute a spacing unit in accordance with the applicable orders of the North Dakota Industrial Commission for the Bakken pool.

3. Four wells have been drilled in the spacing unit, which are the Bray 5301 43-12H, Achilles 5301 41-12B, Jefferies 5301 43-12B, Larry 5301 44-12B; and three wells have been permitted in the spacing unit, which are the Colville 5301 44-12T, Innoko 5301 43-12T and Yukon 5301 41-12T.

4. By Declaration of Pooled Unit dated August 26, 2011, filed in McKenzie County, North Dakota, document number 422312, all oil and gas interests within the aforementioned spacing unit were pooled.

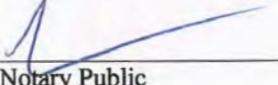
5. All Working Interests, Royalty Interests and Overriding Royalty Interests in the Bray 5301 43-12H, Achilles 5301 41-12B, Jefferies 5301 43-12B, Colville 5301 44-12T, Innoko 5301 43-12T and Yukon 5301 41-12 wells are common.

Dated this 9<sup>th</sup> day of July, 2013.

  
Tom F. Hawkins  
Vice President-Land and Contracts

STATE OF TEXAS      )  
                                ) ss.  
COUNTY OF HARRIS     )

Subscribed to and sworn before me this 9<sup>th</sup> day of July, 2013.

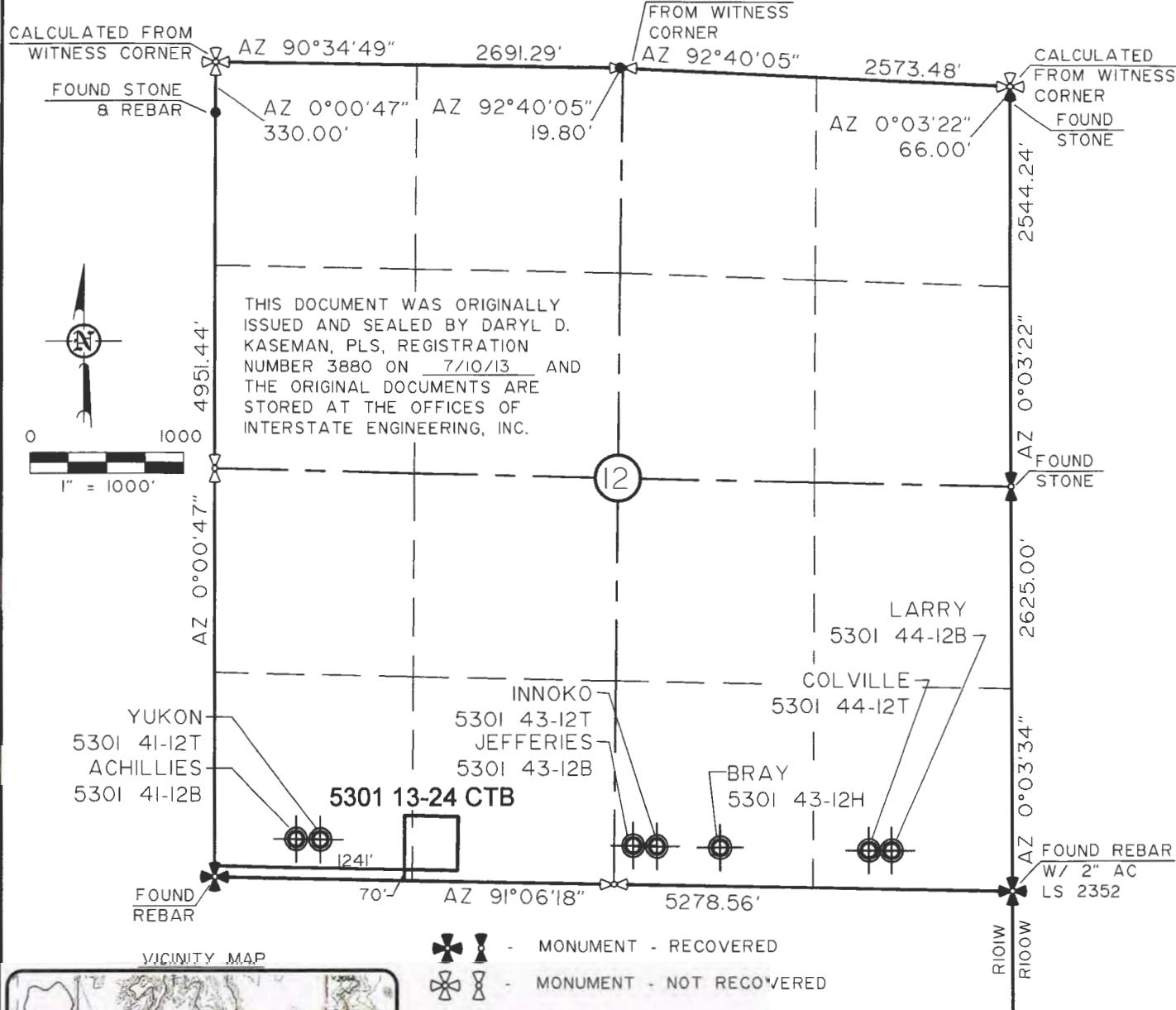
  
Notary Public  
State of Texas  
My Commission Expires: August 14, 2017



**BATTERY LOCATION PLAT**  
OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 202 HOUSTON, TX 77002  
"5301 13-24 CTB"

SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

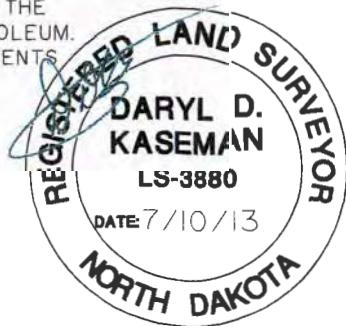
"5301 13-24 CTB"



STAKED ON 3/08/12  
VERTICAL CONTROL DATUM WAS BASED UPON  
CONTROL POINT I3 WITH AN ELEVATION OF 2090.8

THIS SURVEY AND PLAT IS BEING PROVIDED AT THE REQUEST OF FABIAN KJORSTAD OF OASIS PETROLEUM. I CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DARYL D. KASEMAN LS-3880



© 2012, INTERSTATE ENGINEERING, INC.

1/5



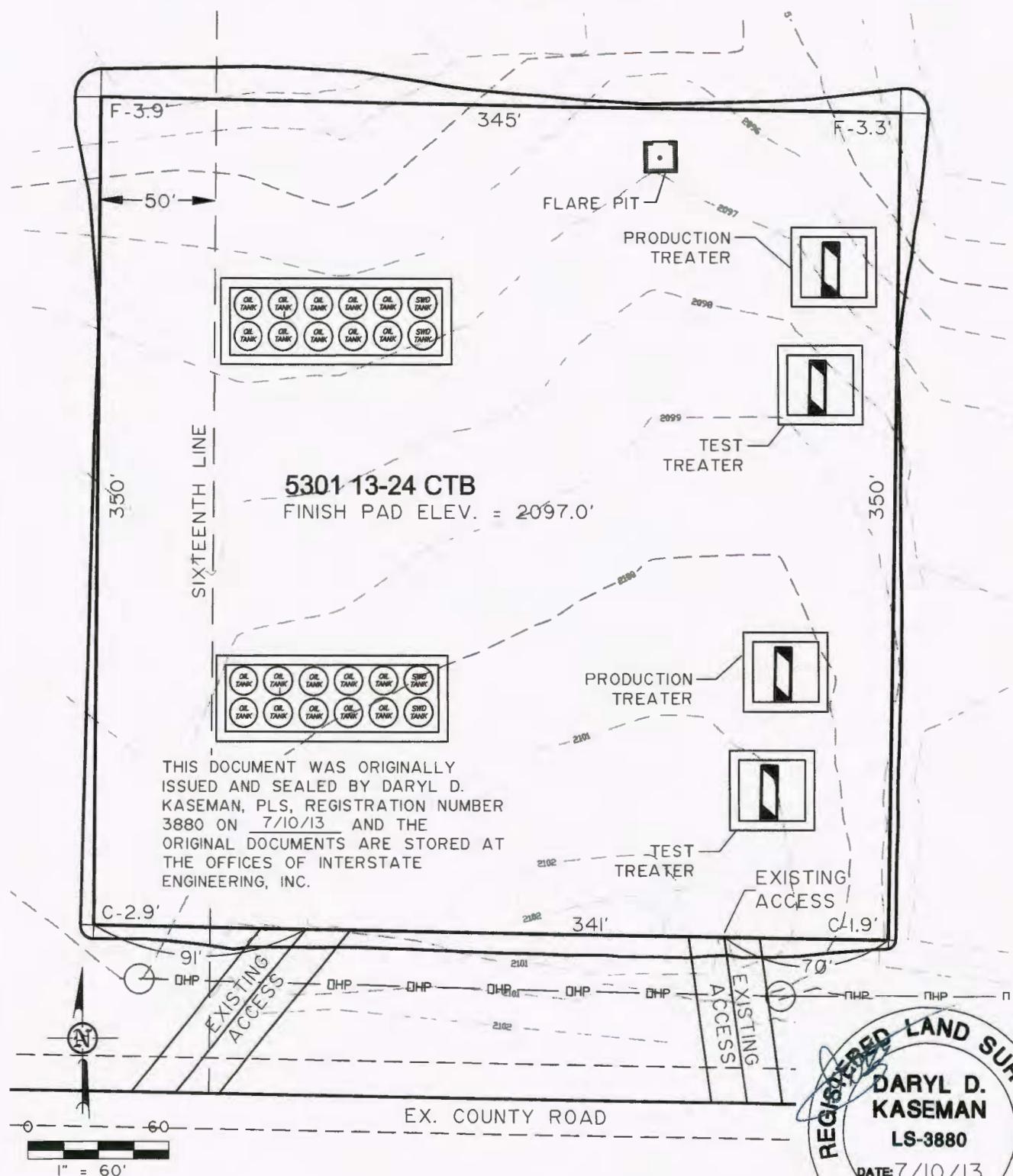
SHEET NO.

**Interstate Engineering, Inc.**  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.iengi.com](http://www.iengi.com)

<p><b>Interstate Engineering, Inc.</b>            P.O. Box 648            425 East Main Street            Sidney, Montana 59270            Ph (406) 433-5617            Fax (406) 433-5618  <a href="http://www.engl.com">www.engl.com</a></p>	<p><b>OASIS PETROLEUM NORTH AMERICA, LLC</b>  <b>WELL LOCATION PLAT</b>  <b>SECTION 12, T15N, R101W</b></p> <hr/> <p><b>MCKENZIE COUNTY, NORTH DAKOTA</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Drawn By:</td> <td style="padding: 2px;">J.D.M.</td> <td style="padding: 2px;">Project No.:</td> <td style="padding: 2px;">S12-09-249</td> </tr> <tr> <td style="padding: 2px;">Checked By:</td> <td style="padding: 2px;">DDK</td> <td style="padding: 2px;">Date:</td> <td style="padding: 2px;">SEPT. 2012</td> </tr> </table>	Drawn By:	J.D.M.	Project No.:	S12-09-249	Checked By:	DDK	Date:	SEPT. 2012
Drawn By:	J.D.M.	Project No.:	S12-09-249						
Checked By:	DDK	Date:	SEPT. 2012						

Revision No.	Date	By	Description
REV I	7/10/13	JDM	ADDED WELLS

**PAD LAYOUT**  
 OASIS PETROLEUM NORTH AMERICA, LLC  
 1001 FANNIN, SUITE 202 HOUSTON, TX 77002  
 "5301 13-24 CTB"  
 SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



NOTE: All utilities shown are preliminary only, a complete utilities location is recommended before construction.

© 2012, INTERSTATE ENGINEERING, INC.

2/5



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 548  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.iengi.com](http://www.iengi.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
PAD LAYOUT  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA  
Drawn By: J.D.M. Project No.: 512-9-249  
Checked By: D.D.K. Date: SEPT. 2012

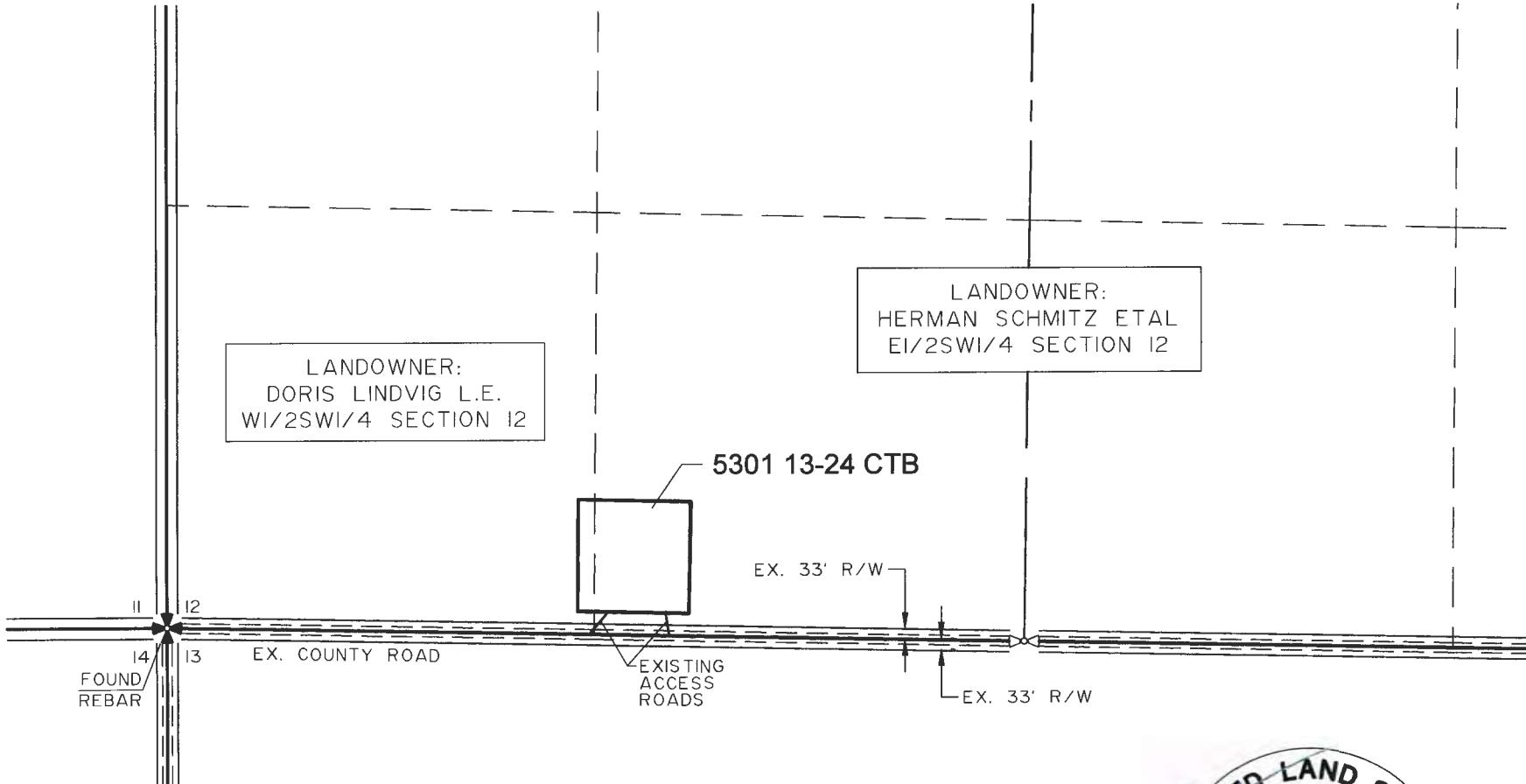
Revision No.	Date	By	Description
REV 1	7/10/13	JDM	ADDED WELLS



# ACCESS APPROACH

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 202 HOUSTON, TX 77002  
"5301 13-24 CTB"

SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

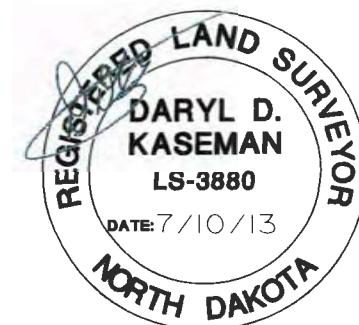


THIS DOCUMENT WAS ORIGINALLY  
ISSUED AND SEALED BY DARYL D.  
KASEMAN, PLS, REGISTRATION NUMBER  
3880 ON 7/10/13 AND THE  
ORIGINAL DOCUMENTS ARE STORED AT  
THE OFFICES OF INTERSTATE  
ENGINEERING, INC.



0 500  
1" = 500'

NOTE: All utilities shown are preliminary only, a complete  
utilities location is recommended before construction.

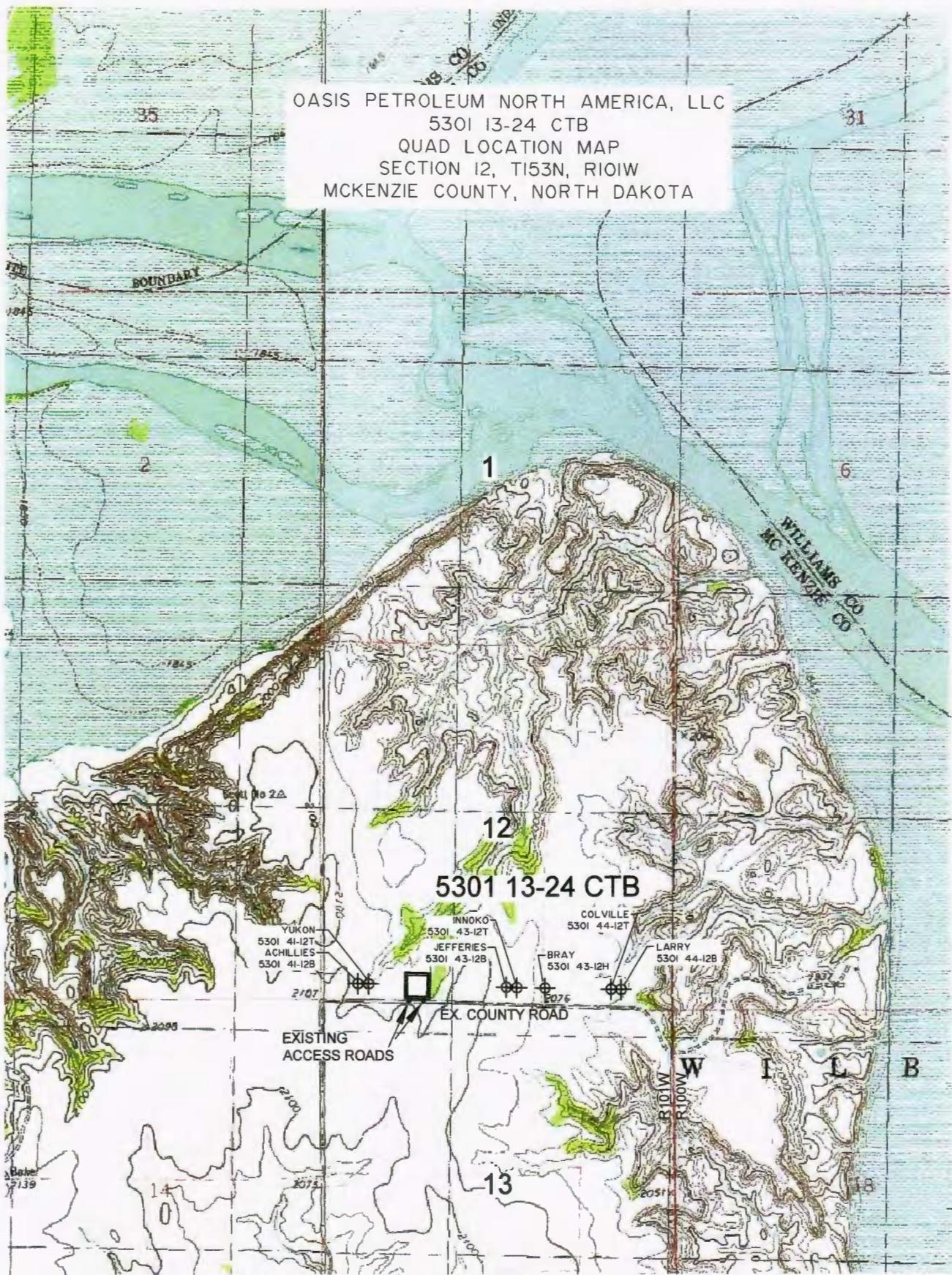


© 2012, INTERSTATE ENGINEERING, INC.

3/5

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph: (406) 433-5617  
Fax: (406) 433-5618  
www.leng.com  
Other offices in Montana, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
ACCESS APPROACH  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA  
Drawn By: J.D.M.  
Checked By: D.D.K.  
Project No.: ST2309-249  
REV. 1  
7/10/13 4PM  
ADDED WELLS  
SHEET 2012  
Date: SEPT. 2012



© 2012, INTERSTATE ENGINEERING, INC.

**4/5**



SHEET NO.

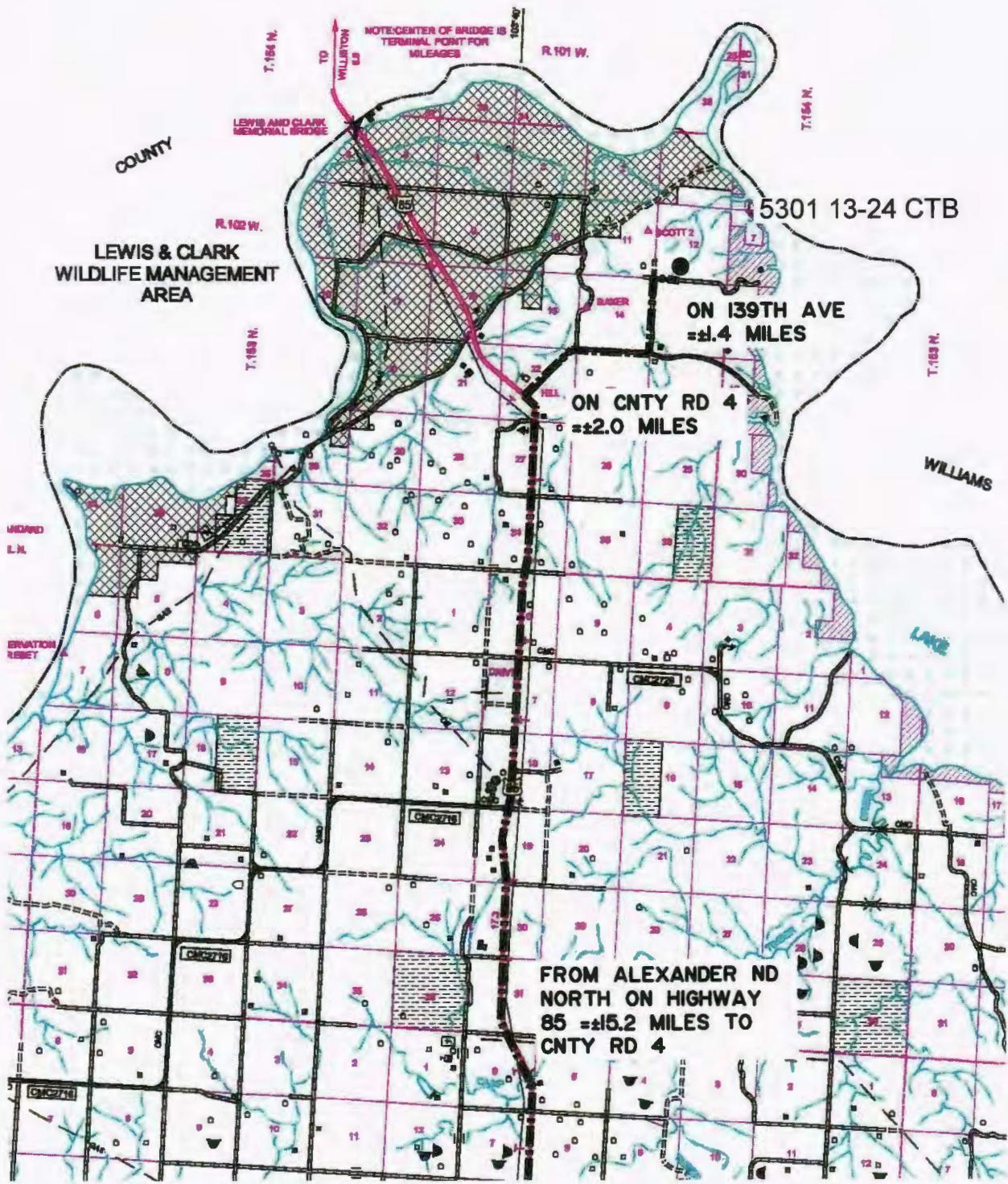
Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.iengi.com](http://www.iengi.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
QUAD LOCATION MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: **J.D.M.** Project No.: **S12-09-249**  
Checked By: **DDK** Date: **SEPT. 2012**

Revision No.	Date	By	Description
REV 1	7/10/13	JDM	ADDED WELLS

**COUNTY ROAD MAP**  
 OASIS PETROLEUM NORTH AMERICA, LLC  
 1001 FANNIN, SUITE 202 HOUSTON, TX 77002  
 "5301 13-24 CTB"  
 SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



© 2012, INTERSTATE ENGINEERING, INC.

SCALE: 1" = 2 MILE

**5/5**



Professionals you need, people you trust

Interstate Engineering, Inc.  
 P.O. Box 648  
 425 East Main Street  
 Sidney, Montana 59270  
 Ph (406) 433-5617  
 Fax (406) 433-5618  
[www.iengi.com](http://www.iengi.com)  
 Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
 COUNTY ROAD MAP  
 SECTION 12, T153N, R101W  
 MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	J.D.M.	Project No.:	S12-09-248
Checked By:	DDK	Date:	SEPT. 2012

Revision No.	Date	By	Description
REV 1	7/10/13	JDM	ADDED WELLS

LAT/LONG PAD CORNERS

345'

48°05'00.01"N  
103°37'13.86"W

48°04'59.95"N  
103°37'08.78"W

5301 13-24 CTB

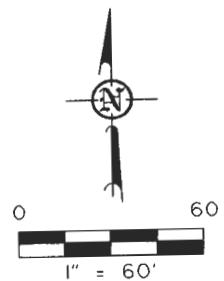
350'

350'

48°04'56.56"N  
103°37'13.89"W

48°04'56.50"N  
103°37'08.87"W

341'





# SUNDRY NOTICES AND REPORTS ON WELLS - FORM 1

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5748 (09-2006)



Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>July 23, 2013</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.		<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
Approximate Start Date		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input checked="" type="checkbox"/> Other	<b>Change well status to CONFIDENTIAL</b>

Well Name and Number <b>Yukon 5301 41-12T</b>					
Footages	710'	Qtr-Qtr	Section	Township	Range
255 F S L	-680 F W L	SWSW	12	153 N	101 W
Field	Pool	County			
<b>BAKER</b>	<b>Bakken</b>	<b>McKenzie</b>			

## 24-HOUR PRODUCTION RATE

Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)			
Address		City	State
			Zip Code

## DETAILS OF WORK

**Effective immediately, we request CONFIDENTIAL STATUS for the above referenced well.**

*OFF CONFIDENTIAL 1/24/14*

Company <b>Oasis Petroleum North America LLC</b>		Telephone Number <b>281-404-9563</b>	
Address <b>1001 Fannin, Suite 1500</b>			
City <b>Houston</b>		State <b>TX</b>	Zip Code <b>77002</b>
Signature <i>Heather McCowan</i>	Printed Name <b>Heather McCowan</b>		
Title <b>Regulatory Assistant</b>	Date <b>July 23, 2013</b>		
Email Address <b>hmccowan@oasispetroleum.com</b>			

## FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>7/25/13</b>	
By <i>Alice D. Weber</i>	
Title <b>Engineering Technician</b>	

# Oasis Petroleum North America, LLC

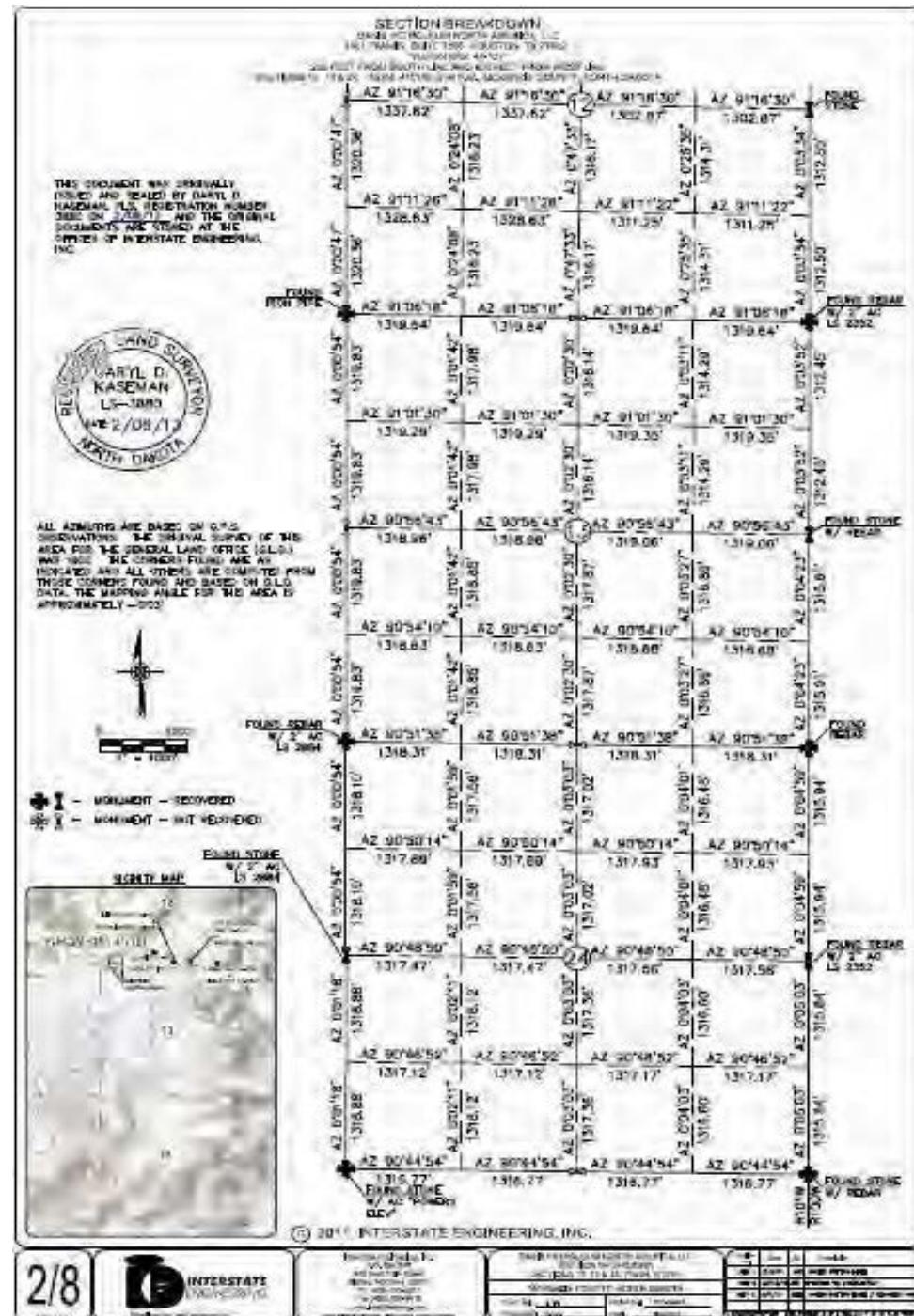
## Yukon 5301 41-12T

255' FSL & 710' FWL

SW SW Section 12, T153N-R101W

Baker Field / Three Forks

McKenzie County, North Dakota



2/8



SURVEY INFORMATION		SECTION INFORMATION	
Surveyor:	Daryl D. Kaseman, LS-1880	Section:	12
Date:	2/08/12	Range:	R101
Latitude:	46° 50' 00" N	Meridian:	M153
Longitude:	102° 45' 00" W	Section Description:	SW SW Section 12, T153N-R101W

### BOTTOM HOLE LOCATION:

10,504.47' south & 618.46' east, of surface location or approx.

295.55' FSL & 1,328.46' FWL, SE SW Section 24, T153N-R101W

#### Prepared for:

Brian Cornette  
Oasis Petroleum North America, LLC  
1001 Fannin, Suite 1500  
Houston, TX 77002

#### Prepared by:

G. Wayne Peterson, Michelle Baker, Dallas M  
PO Box 51297; Billings, MT 59105  
2150 Harnish Blvd., Billings, MT 59101  
(406) 259-4124  
geology@sunburstconsulting.com  
www.sunburstconsulting.com

# **WELL EVALUATION**



**Figure 1. Nabors B22 drilling the Oasis Petroleum North America, LLC - Yukon 5300 41-12T during June and July, 2013 in Camp Field, McKenzie County, North Dakota.**  
**(G. Wayne Peterson, Sunburst Consulting)**

## **INTRODUCTION**

Oasis Petroleum North America, LLC. Yukon 5301 41-12T [SW SW Sec. 12-T153N-R101W] is located approximately 3 miles south of Williston in McKenzie County, North Dakota. The Yukon 5301 41-12T is a horizontal Three Forks development well in part of Oasis Petroleum's Camp prospect within the Williston Basin. The vertical hole was planned to be drilled to approximately 10,335'. The curve would be built at 12 degrees per 100' to land within the Three Forks. This well is a two section lateral which originates in the southwest quarter of section 12, then drilled south across section 13, to the southwest quarter of section 24 (Figure 2). Directional drilling technologies and geo-steering techniques were used to land in the upper Three Forks reservoir and maintain exposure to the ideal target rock.

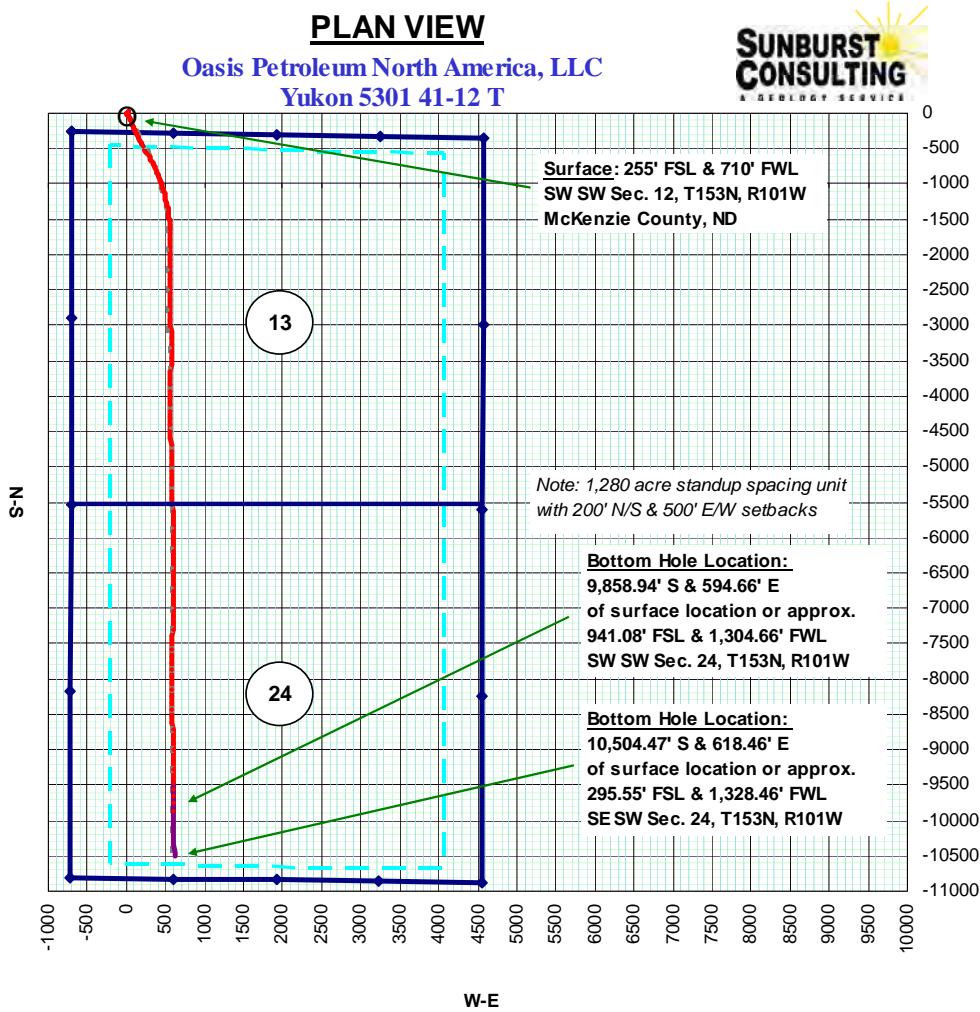


Figure 2. Plan view of Yukon 5301 41-12T spacing unit and well path.

## OFFSET WELLS

The primary offset wells used for depth correlation during curve operations were the Gulf Oil Exploration and Production, Lindvig 1-11-3C; and the Oasis Petroleum North America, LLC Ash Federal 5300 11-18T. The Gulf Oil Exploration and Production, Lindvig 1-11-3C [SE SE Sec. 11, T153N, R101W] is located approximately ½ of a mile west of the Yukon 5301 41-12T. This well was completed in March of 1982 reached a total depth of 13,800' true vertical depth (TVD). The Oasis Petroleum North America, LLC Ash Federal 5300 11-18T [Lot 1 Section 18, T153N, R100W] is located approximately east north east of the Yukon 5301 41-12T. This well was drilled to the Three Forks landing of 10,794' MD in August and September of 2012. The formation thicknesses expressed by gamma signatures in these wells, and the Oasis Petroleum North America, LLC Larry 5301 44-12B [SE NE Section 12, T153N, R101W] were used to assist in landing the curve. This was accomplished by comparing gamma signatures from the offset wells to gamma data collected during drilling operations. The casing target landing was periodically updated to ensure accurate landing of the curve. Data used in this evaluation are included as an appendix to this report.

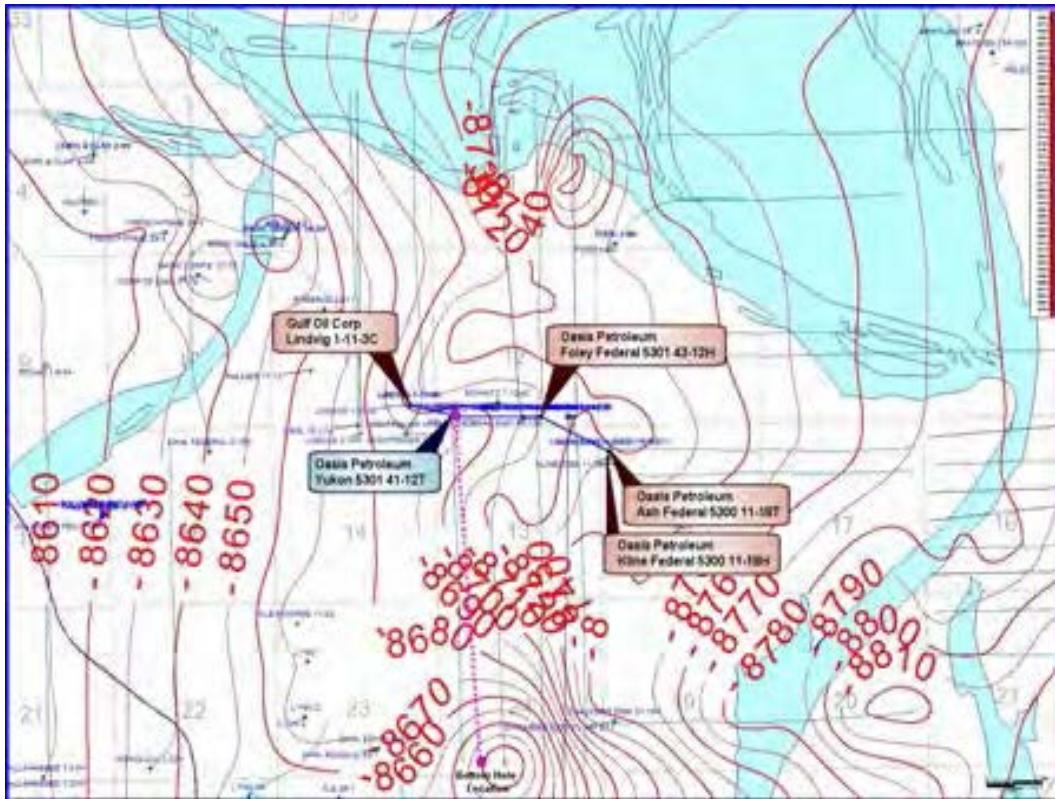


Figure 3. Structure map of the Three Forks Top (subsea) with annotated offset wells (Oasis Petroleum).

## ENGINEERING

Ryan Energy Technologies provided personnel and equipment for measurement-while-drilling (MWD) services. The RPM directional drillers MWD and Sunburst Consulting personnel worked closely together throughout the project to evaluate data and make steering decisions to maximize the amount of borehole in the targeted zones and increase rate of penetration (ROP) of the formation.

### Vertical

The Yukon 5301 41-12T was spud on 18 June, 2013 by Nabors B22. A 13 1/2" hole was drilled with fresh water to 2,127' and isolated with 9 5/8" J-55 casing cemented to surface. After surface casing was set, the drilling fluid was changed to diesel invert with target weight of 9.6-10.2 ppg for the vertical hole and 10.3-10.55 ppg for curve operations. The vertical hole was drilled from surface casing with bit #2 a Security MMD55M attached to a Hunting 7/8 low speed motor. This assembly drilled to the KOP of 10,300' MD, drilling 8,173' in 65 hours.

### Curve

The 873' curve was drilled in 22.5 hours with bit #3 a Security MMD55D, attached to a 2.38 degree fixed National 7/8 5 stage mud motor and MWD tools. The curve was successfully landed at 11,173' MD, approximately 8' into the Three Forks Formation. Seven inch diameter 32# HCP-110 casing was set to 11,173' MD. During casing operations circulation was lost. Casing

was worked up and down in an attempt to restore circulation, but all efforts to restore circulation failed. A wire-line truck was called in and casing was perforated at 10,820' MD. Circulation was restored and casing was cemented.

## Lateral

After completion of curve operations, MWD tools and bit #4, a 6" Security MMD64D PDC bit, attached to a 1.5° adjustable Baker XLLS low speed motor were run in the hole. This bottom hole assembly (BHA) drilled 2,502' in 47 hours before erratic pulses from the MWD tool caused it to be tripped out of hole (TOH). A new BHA consisting of bit #5 a Smith MDSI613QBPX PDC bit, a new 1.5° adjustable Baker XLLS low speed motor and new MWD tools were tripped into the hole (TIH). This assembly drilled 2,502' in 47 hours before the MWD tool ceased pulsing, and this BHA was TOH. A new assembly consisting of bit #6 a Smith MDSI613QBPX PDC bit, a new 1.5° adjustable Baker XLLS low speed motor and new MWD tools were tripped into the hole. This assembly drilled 3,165' in 56 hours before poor penetration rates caused it to be TOH. A new assembly consisting of bit #7 a Varel VM613P2 PDC bit, a new 1.5° adjustable Baker XLLS low speed motor and the previously run MWD tools were tripped into the hole. This assembly drilled to 20,573', drilling 904' in 23 hours before an encounter with the pronghorn caused a sidetrack. The BHA was tripped back to 20,275' MD and the hole was troughted, then time drilled for a sidetrack. The sidetrack was unsuccessful, consequently bit #7 after time drilling 5' in 21 hours was TOH. A new assembly consisting of bit #8, a Smith MDSI613 attached to a NOV 7/8 3.8 motor along with new MWD tools was assembled and TIH for sidetrack attempt #2. This sidetrack was successful; this assembly drilled 457' in 27 hours before poor penetration rates caused it to be TOH. A new BHA consisting of bit #9 a 6" Security MMD64D PDC bit, a new 1.5° adjustable Baker XLLS low speed motor and new MWD tools were tripped into the hole. This assembly drilled to TD, drilling 498' in 8.5 hours.

Total depth of 21,220', with a final azimuth of 175.70° and inclination of 89.5° was achieved at 1550 hours CDT July 16, 2013. The resulting final vertical section was 10,522.61'. The bottom hole location (BHL) is 10,504.47 south & 618.46' east of surface location or approximately 295.55' FSL & 1,328.46' FWL, SE SW Sec. 24, T153N, R101W. The hole was then circulated and reamed for completion.

# GEOLOGY

## Methods

Geologic analysis for the Yukon 5301 41-12T was provided by Sunburst Consulting, Inc. Information was networked through Rig-watch's electronic data recorder system. This information network provided depth, drilling rate, pump strokes and total gas units to multiple areas throughout the well site. Gas data was fed from Sunburst's digital gas detector, a total gas chromatograph, through Rig-watch for dissemination. Hydrocarbon constituents (C<sub>1</sub> through C<sub>4</sub>) were recorded in part-per-million concentrations. Gas sampling was pulled through ¼" polyflo tubing after agitation in Sunburst's gas trap at the shakers. Rig crews caught lagged samples at the direction of the well site geologists. Samples were collected at 30' intervals in the vertical/curve and 30' intervals in the lateral. Rock cuttings were analyzed in wet and dry conditions under a 10x45 power binocular microscope (for detailed lithologic descriptions see appendix). Cuttings were sent to North Dakota Geologic Survey. In addition to rock samples, rate of penetration and gamma ray data were also used in geologic analysis to aid geo-steering and dip calculations.

## Lithology

Formation analysis began at 8,240' MD with a siltstone and anhydrite characteristic of the Kibbey Formation [Mississippian Big Snowy Group]. This interval consisted of an earthy, red to orange, red brown, light orange to off white, trace light brown, friable siltstone that was moderately calcite cemented with an earthy texture. The Kibbey "Lime" was logged at 8,366' MD 8,365' TVD (-6,246') (SS). This marker is represented by an off white anhydrite which was microcrystalline, soft, massive, and amorphous. The anhydrite is often accompanied by slower penetration rates as the bit transitions out of the overlying siltstone. The rate of penetration (ROP) then increases as the bit exits the anhydrite cap to this marker and enters the underlying limestone mudstone to wackestone. This carbonate was described as a light gray light gray brown, off white lime mudstone which was microcrystalline, friable, and dense with an earthy texture. Samples in the lower section consisted of red to orange, red brown, light orange to off white, trace light brown, friable and blocky siltstone with calcite cement moderately cemented. This facies was interbedded with soft, off white amorphous or microcrystalline anhydrite.

The Charles Formation [Mississippian Madison Group] consisted of salt, anhydrite, limestone and argillaceous lime mudstone. The first Charles salt was drilled at 8,508' MD 8,507' TVD (-6,338') SS. The Base of the Last Salt (BLS) was logged at 9,214' MD 9,212' TVD (-7,093') SS as indicated by slower penetration rates and increased weight on bit. The beds of salt within the Charles Formation can be identified by an increase in penetration rates and lower API gamma count rates. Samples of the salt intervals were described as frosted, translucent, anhedral to subhedral, with no visible porosity. Slower penetration rates were observed as the bit encountered sections of light brown, gray brown, gray, gray brown lime mudstone which was friable to firm and dense, with an earthy texture. This limestone was argillaceous in part in areas where gamma API counts were elevated, and contained a trace of disseminated pyrite. No visible oil stain was noted. In areas where the penetration rates were slowest anhydrite was logged. These samples were described as off white, light gray, soft, massive and amorphous. Within the Charles Formation at 9,126' MD slower penetration rates indicated the presence of anhydrite.

This section was approximately 12' thick, its base, as indicated by the transition to faster penetration rates and higher gamma API counts is indicative of the Upper Berentson which was drilled at 9,138' MD 9,136' TVD (-7,017') SS.

The Ratcliffe interval [Charles Formation] was drilled at 9,264' MD 9,262' TVD (-7,143') SS. The top of this interval was observed as faster penetration rates were encountered, as the well bore transitioned from anhydrite to limestone mudstone. This limestone was tan to light brown, occasional light gray tan, rare off white lime mudstone. This facies was microcrystalline, firm, with an earthy and crystalline texture and contained a trace of disseminated pyrite. Also noted in certain areas was a trace *light brown oil stain*; possible earthy to intercrystalline porosity may have been present

The Mission Canyon Formation [Mississippian Madison Group] was logged at 9,444' MD 9,442' TVD (-7,323') SS. The Mission Canyon Formation consisted of lime mudstone that was described as light gray, light gray brown, light brown to brown, gray brown, rare off white, trace gray in color. The microcrystalline was predominately friable to firm, dense with an earthy to crystalline texture. Some intervals were trace siliceous with traces of disseminated pyrite. Fossil fragments, along with black, dark brown algal laminations were visible in some samples throughout the Mission Canyon Formation. Following connections or downtime (periods of non-circulation), gas shows of 27 to 37 units were noted A trace to rare *spotty light brown and dark brown dead spotty oil stain* was occasionally observed while logging the Mission Canyon Formation.



**Figure 4. Limestone with spotty light brown and dead dark brown oil staining from the Mission Canyon Formation.**

The Lodgepole Formation [Mississippian Madison Group] was encountered at 10,003' MD 10,001' TVD (-7,882') SS. This interval was characterized by medium to light gray, occasional medium gray tan, rare dark gray, trace light gray brown, trace black gray, argillaceous lime mudstone which was evidenced by the elevated gamma. The lithology was further characterized as being microcrystalline, firm, and dense, with an earthy texture. Also present in certain areas were traces of algal laminations and fossil fragments. Disseminated pyrite was also seen in the samples as a trace mineral. No significant gas shows were noted in this formation.

The “False Bakken” [Lodgepole Formation] was drilled at 10,749' MD 10,697' TVD (-8,578') SS, and the Scallion limestone at 10,752' MD 10,700' TVD (-8,581') SS. Samples from the False Bakken are typically brown, black, shale, friable, subblocky with an earthy texture. This facies is calcareous, with traces of disseminated pyrite. Gas levels were slightly elevated through this interval with a maximum connection gas of 748 units likely due to fracture porosity.

The Upper Bakken Shale Member [Mississippian-Bakken Formation] was drilled at 10,765' MD 10,709' TVD (-8,590') SS. Entry into this member was characterized by high gamma, elevated background gas and increased rates of penetration. The black carbonaceous and *petroliferous* shale was sub blocky and firm with an earthy texture. Trace minerals were observed to include disseminated pyrite and calcite fracture fill, representing possible fracture porosity. Hydrocarbons evaluated in this interval reached a maximum of 916 units.

The Bakken Middle Member [Mississippian-Devonian] was reached at 10,793' MD 10,724' TVD (-8,605') SS. This formation was predominantly siltstone and silty sandstone noted by the decreasing penetration rates, gamma API counts, and recorded gas levels, relative to the overlying source rock. The siltstone was light gray, light gray brown, sub-blocky, with an earthy texture. It was moderately calcite cemented, with a trace of disseminated pyrite. Also present was silty sandstone which was light gray, light brown, light gray brown, friable, very fine grained, well sorted, friable, sub-angular to sub-round, and contained possible intergranular porosity. It was moderately calcite cemented. Trace minerals included disseminated and nodular pyrite. Drilling gas in this interval reached a maximum of 154 units. Also observed was *spotty light brown spotty oil stain*.

The Lower Bakken Shale Member [Devonian] was reached at 10,885' MD 10,767' TVD (-8,648') SS. This was 6' to the Lindvig 1-11-3C. Entry into this interval was characterized by high gamma, elevated background gas and increased rates of penetration. The carbonaceous black shale is *petroliferous*, with an earthy texture and exhibits possible fracture porosity. Trace minerals included disseminated pyrite. Drilling gas in this interval reached a maximum of 135 units with a connection gas of 158 units.



**Figure 5. Sample of gray siltstone from the Pronghorn Member.**

The Pronghorn Member [Devonian-Bakken Formation] was reached at 10,917' MD 10,775' TVD (-8,656') SS. Entry into this interval was characterized by lower gamma, and slightly slower penetration rates. Samples from the Pronghorn were described as a siltstone which was medium to dark gray, friable, sub-platy to sub-blocky, with an earthy texture. The siltstone was moderately dolomite cemented and included disseminated and nodular pyrite. Drilling gas in this interval reached a maximum of 91 units with a connection gas of 142 units.

The Three Forks Formation [Devonian] was reached at 10,995' MD 10,794' TVD (-8,675') SS. The target zone of the Three Forks was to be drilled in the dolomitic facies in a ten foot zone beginning 8 feet into the Three Forks Formation. This target zone was later revised to an 8 foot drilling zone located sixteen feet into the Three Forks Formation. The revised plan was implemented to avoid deflections from multiple tight streaks located high in formation, and to take advantage of the low gamma primarily dolomitic facies, which proved useful for steering decisions.



**Figure 6.** Sample of the predominately dolomitic facies in the updated preferred drilling zone of the Three Forks formation on left; sample of the underlying claystone on the right.

Samples in the Three Forks were commonly dolomite which was tan to light brown, occasional medium brown, occasional off white to cream. Additionally this facies was friable with an earthy texture. It also contained a trace of disseminated and nodular pyrite. Possible intercrystalline porosity was observed, as was a *rare to a trace of light brown spotty oil stain*. Present in varying amounts was light gray, off white, rare light green to mint green shale which was friable to firm, sub-blocky with an earthy texture. Trace of nodular and disseminated pyrite was noted, and the shale contained no visible porosity.

## Gas Show

Gas monitoring and fluid gains provided evidence of a hydrocarbon saturated reservoir during the drilling of the Yukon 5301 41-12T. Oil and gas shows at the shakers and in samples were continuously monitored. In the closed mud system, hydrostatic conditions were maintained near balance, this allowed for gas and fluid gains from the well to be evaluated. Gas on the Yukon 5301 41-12T varied according to penetration rates and stratigraphic position. Background concentrations ranged from 150 to 250 units, and connection peaks of 300 to 500 units were

observed in the middle portion of formation while drilling in the lateral where shows were the best. Trips at 13,675' MD, 16,506' MD, 19,671' MD, and 20,265' MD, yielded trip gases of 2,256, 5,778, 6,745, and 2,423 units respectively. Chromatography of gas revealed typical concentrations of methane, ethane, propane and butane characteristic of Bakken and Three Forks gas (Figure 7).

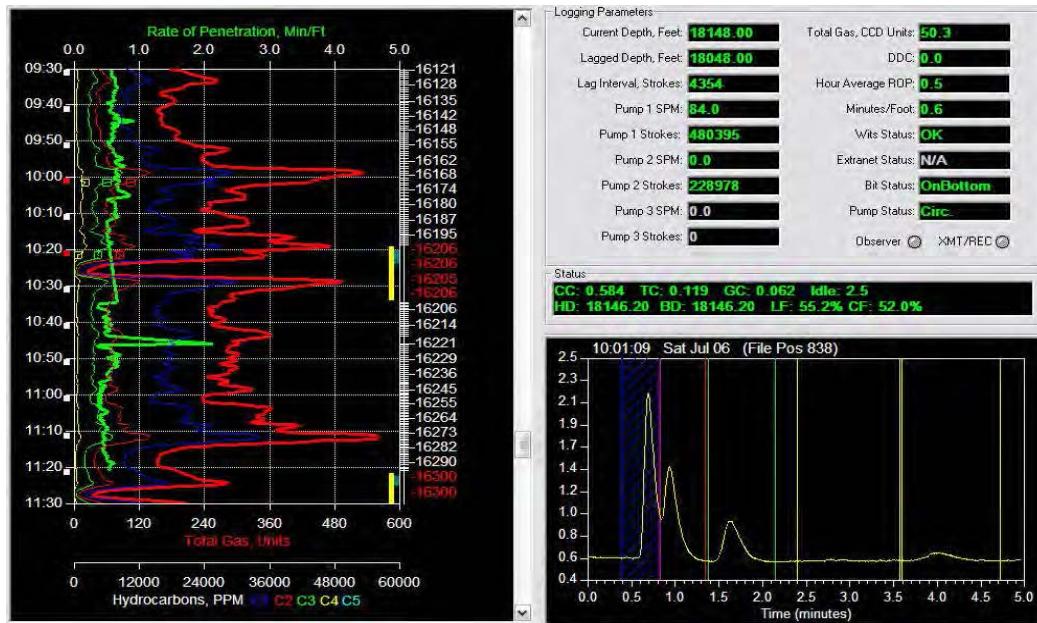


Figure 7. Gas chromatography of 500 unit connection gas peaks. Note the measurable concentration of C<sub>4</sub> at 4.0 minutes.

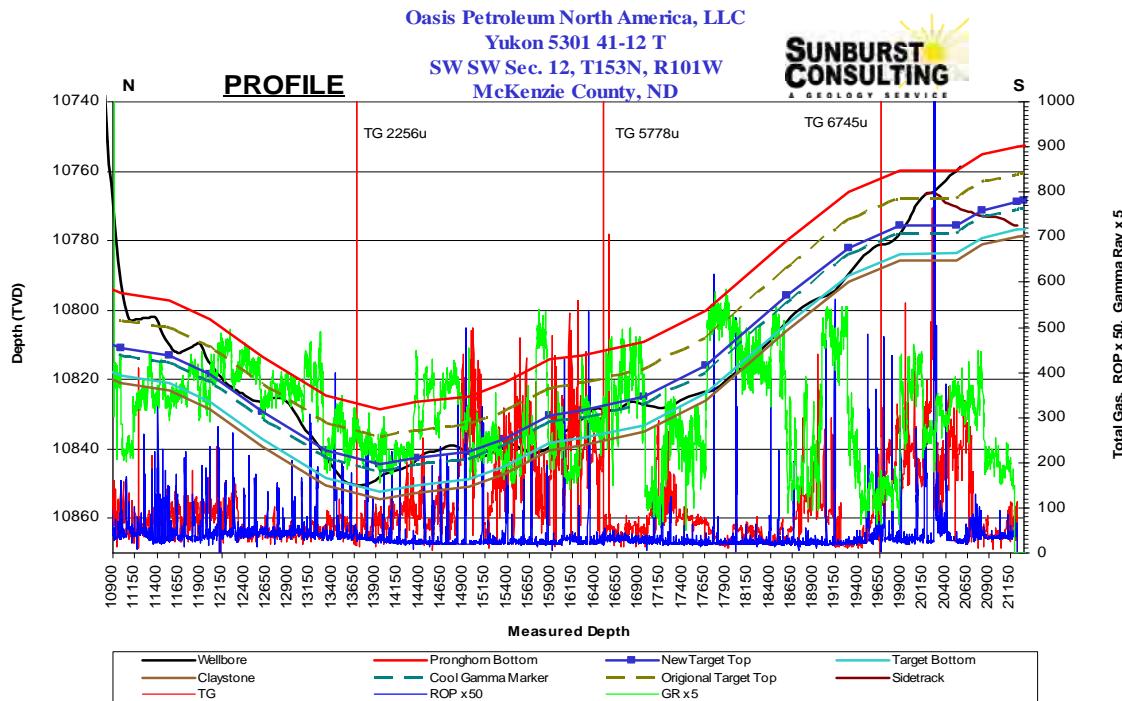


Figure 8. Profile displaying total gas, gamma ray and rate of penetration.

## Geo-steering

Geologic structure maps of the Yukon 5301 41-12T and surrounding control wells, estimated formation dip to move down at approximately  $-0.3^{\circ}$  initially, then reverse due to a plunging syncline at about 2,500', reversing to an estimated  $0.5^{\circ}$  to  $1.0^{\circ}$  until total depth (TD) was reached. The Yukon 5301 41-12T preferred drilling interval consisted of a ten foot zone located approximately eight feet into the Three Forks Formation. Stratigraphic position in the target zone was based on penetration rates, gas shows, gamma ray data and sample observations. The projected target landing was to be ten feet into the Three Forks and was successfully reached prior to casing operations. Using offsets provided by Oasis representatives, projected porosity zones were identified as the preferred drilling areas (Figure 9).

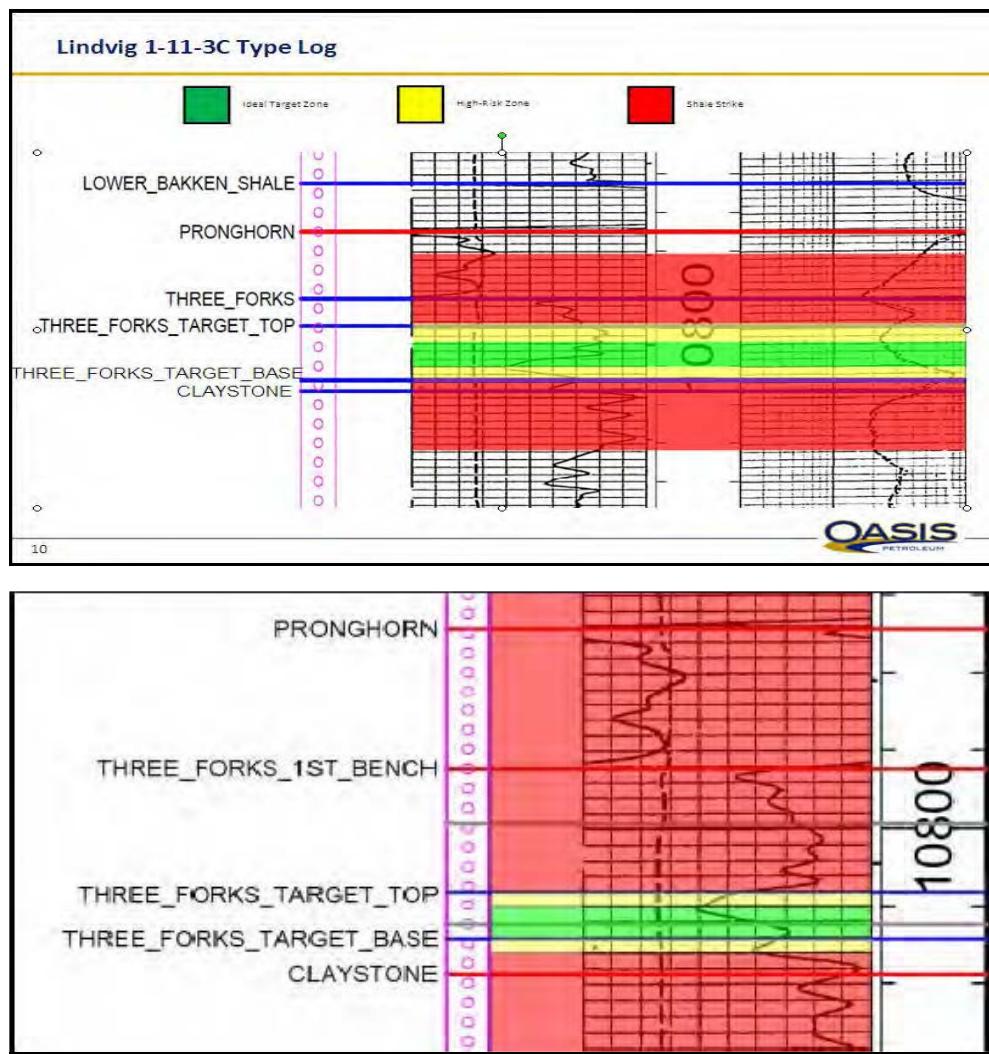


Figure 9. Type log gamma profile from the Lindvig 1-11-3C, with initial target points on top and revised tops on bottom.

As the well bore moved from the top to the bottom of the preferred drilling zone, gamma API counts, collected samples, and gas were evaluated along with penetration rates to identify areas within the 10' preferred drilling zone that yielded the best potential.

After exiting intermediate casing the well-bore onsite personnel attempted to steer the well-bore down to the low gamma portion of the drilling zone to attempt to establish dip. After multiple encounters with tight streaks which moved the well-bore's inclination above 90 degrees the directional drillers were able to position the well-bore in the lower gamma area of the drilling zone. At this point the target zone was revised to an 8 foot drilling zone located sixteen feet into the Three Forks Formation. The revised plan was implemented to avoid deflections from multiple tight streaks located high in formation, and to take advantage of the low gamma primarily dolomitic facies which proved useful for steering decisions. Steering decisions from this point were made by using the higher gamma, of the claystone, the low gamma located in the middle to higher portion of the drilling zone, and the fluctuating high to medium gamma located at the top of the drilling zone.

At 20,573' MD while taking a check shot to determine the well-bore inclination, spiking differential pressure shut down the pumps. It was determined that the well-bore had entered the pronghorn formation at 20,530' MD, which was causing the hole to pack off. Working the pipe and pumping cleared the hole enough to take a survey at 20,573' MD with a survey depth of 20,520', which showed an inclination of 91.5°. A previous check shot at 20,535' MD and a survey depth of 20,482' showed an inclination of 90.5°; a difference of 1° change in inclination over 38' while rotating. This illustrates one of the problems encountered in the later portion of the lateral. Despite multiple down side slides, the well-bore showed a persistent tendency to build rapidly on rotation. Onsite personnel at this time were plotting the formation inclination at 0.61° up, which had been recently revised from a 1.12° up dip. The data from the pronghorn strike when plotted with previous data determined that the formation had unexpectedly rolled over to a dip of 0.01. This unexpected dip change combined with the well-bores tendency to build on rotation, and the difficulty in sliding, and obtaining effective slides all contributed to the pronghorn strike.

Samples tended to contain a greater quantity of the tan to cream, rare off white dolomite where gamma values were lower, and relatively a greater quantity of the blue green gray shale where gamma values were higher. Samples from the claystone contained a dolomite mudstone, which was gray, tan to cream, with a trace of light gray, and a trace of off white. It was very fine crystalline, friable, dense, with an earthy texture. Minerals present were rare disseminated pyrite, along with a trace of nodular pyrite. Also noted was possible intercrystalline porosity, and *common spotty light to medium brown oil stain*. Also present in samples taken from the higher gamma claystone facies was shale. This shale was a light gray green to light gray, pale green with a trace off white. This shale was firm, subblocky, with an earthy texture, along with a trace disseminated pyrite. No visible oil stain was noted in the observed shale. Where the low gamma was encountered in the bottom of the target interval, thin layers of dolomite contained possible fair to good intercrystalline porosity and *common spotty light to medium brown oil staining*.

The TD of 21,450' MD was achieved at 1550 hours CDT on July 16, 2013. The well site team worked well together maintaining the well bore in the desired target interval for 88% of the lateral, opening 10,225' of potentially productive reservoir rock. The hole was then circulated and reamed for completion.

## SUMMARY

The Yukon 5301 41-12T is a successful well in Oasis Petroleum's horizontal Three Forks development program in Baker Field. The project was drilled from surface casing to TD in 19 days. The TD of 21,220' MD was achieved at 1550 hours CDT July 16, 2013. The well site team worked well together maintaining the well bore in the desired target interval for 88% of the lateral, opening 10,225' of potentially productive reservoir rock.

Diesel invert drilling fluid 9.6-10.2 ppg for the vertical hole and 10.3-10.55 ppg for curve operations were used to maintain stable hole conditions, minimize washout through the salt intervals and permit adequate analysis of mud gas concentrations.

Samples in the Three Forks were commonly dolomite which was tan to light brown, occasional medium brown, occasional off white to cream. Additionally this facies was friable with an earthy texture. It also contained a trace of disseminated and nodular pyrite. Possible intercrystalline porosity was observed, as was a *rare to a trace of light brown spotty oil stain*. Present in varying amounts was light gray, off white, rare light green to mint green shale which was friable to firm, sub-blocky with an earthy texture. Trace of nodular and disseminated pyrite was noted, and the shale contained no visible porosity.

Samples tended to contain a greater quantity of the tan to cream, rare off white dolomite where gamma values were lower, and relatively a greater quantity of the blue green gray shale where gamma values were higher. Where the low gamma was encountered in the bottom of the target interval, thin layers of dolomite contained possible fair to good intercrystalline porosity and *common spotty light to medium brown oil staining*.

Gas on the Yukon 5301 41-12T varied according to penetration rates and stratigraphic position of the well bore. Observed concentrations ranged from 150 to 250 units background, and connection peaks of 300 to 500 units were observed in the middle portion of formation where shows were the best while drilling in the lateral. Trips at 13,675' MD, 16,506' MD, 19,671' MD, and 20,265' MD, yielded trip gases of 2,256, 5,778, 6,745, and 2,423 units respectively

The Oasis Petroleum North America, LLC. Yukon 5301 41-12T awaits completion operations to determine its ultimate production potential.

Respectfully submitted,

*G. Wayne Peterson*  
Sunburst Consulting, Inc.  
18 July, 2013

# **WELL DATA SUMMARY**

<b><u>OPERATOR:</u></b>	Oasis Petroleum North America, LLC
<b><u>ADDRESS:</u></b>	1001 Fannin, Suite 1500 Houston, TX 77002
<b><u>WELL NAME:</u></b>	<b>Yukon 5301 41-12T</b>
<b><u>API #:</u></b>	33-053-03911
<b><u>WELL FILE #:</u></b>	22099
<b><u>SURFACE LOCATION:</u></b>	255' FSL & 710' FWL SW SW Section 12, T153N-R101W
<b><u>FIELD/ PROSPECT:</u></b>	Baker Field / Three Forks
<b><u>COUNTY, STATE</u></b>	McKenzie County, North Dakota
<b><u>BASIN:</u></b>	Williston
<b><u>WELL TYPE:</u></b>	Three Forks Horizontal
<b><u>ELEVATION:</u></b>	GL: 2,094' KB: 2,119'
<b><u>SPUD/ RE-ENTRY DATE:</u></b>	June 18, 2013
<b><u>BOTTOM HOLE LOCATION:</u></b>	4,765.98' south & 4,781.26' east of surface location or approx. 514.02' FSL & 498.74' FEL, SE SE Section 33, T154N-R88W
<b><u>CLOSURE COORDINATES:</u></b>	Closure Azimuth: 176.55° Closure Distance: 9,876.85'
<b><u>BOTTOM HOLE LOCATION ST1:</u></b>	10,504.47' south & 618.46' east, of surface location or approx. 295.55' FSL & 1,328.46' FWL, SE SW Section 24, T153N-R101W
<b><u>CLOSURE COORDINATE ST1:</u></b>	Closure Azimuth: 176.63° Closure Distance: 10,522.66'

<u><b>TOTAL DEPTH / DATE:</b></u>	21,220' on July 16, 2013 88% within target interval
<u><b>TOTAL DRILLING DAYS:</b></u>	29 days
<u><b>CONTRACTOR:</b></u>	Nabors #B22
<u><b>PUMPS:</b></u>	H&H Triplex (stroke length - 12")
<u><b>TOOLPUSHERS:</b></u>	Jessie Tibbets, Chase Erdman
<u><b>FIELD SUPERVISORS:</b></u>	Dominic Bohn, Doug Rakstad
<u><b>CHEMICAL COMPANY:</b></u>	NOV
<u><b>MUD ENGINEER:</b></u>	Larry Langenfeld, Joe Standar
<u><b>MUD TYPE:</b></u>	Fresh water in surface hole Diesel invert in curve; Salt water in lateral
<u><b>MUD LOSSES:</b></u>	Invert Mud: 498 bbls, Salt Water: 0 bbls
<u><b>PROSPECT GEOLOGIST:</b></u>	Brian Cornette
<u><b>WELLSITE GEOLOGISTS:</b></u>	G. Wayne Peterson, Michelle Baker, Dallas Murray
<u><b>GEOSTEERING SYSTEM:</b></u>	Sunburst Digital Wellsite Geological System
<u><b>ROCK SAMPLING:</b></u>	30' from 8,240' - 11,000' & 11,173' - 20,220' (TD) 10' from 11,000' - 11,173'
<u><b>SAMPLE EXAMINATION:</b></u>	Binocular microscope & fluoroscope
<u><b>SAMPLE CUTS:</b></u>	Trichloroethylene (Carbo-Sol)
<u><b>GAS DETECTION:</b></u>	MSI (Mudlogging Systems, Inc.) TGC - total gas with chromatograph Serial Number(s): ML-382
<u><b>DIRECTIONAL DRILLERS:</b></u>	RPM, Inc. Dominic Bohn, Doug Rakstad, Rick Bansemer

**MWD:**

Ryan

Mike McCammond, Bill Alldaffer

**CASING:**

Surface: 9 5/8" 36# J-55 set to 2,127'

Intermediate: 7" 32# P-110 set to 11,108'

**KEY OFFSET WELLS:**

**Gulf Oil**

**Lindvig 1-11-3C**

SE SE Sec. 11, T153N, R101W

McKenzie County, ND

**Oasis Petroleum North America LLC.**

**Larry 5301 44-12B**

SE NE Section 12, T153N, R101W

McKenzie County, ND

**Oasis Petroleum North America LLC.**

**Ash Federal 5300 11-18T**

Lot 1 Section 18, T153N, R100W

McKenzie County, ND

**WELL LOCATION PLAT**  
 OASIS PETROLEUM NORTH AMERICA, LLC  
 1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
 "YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
 SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

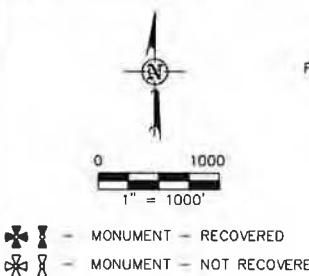
THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D KASEMAN, PLS, REGISTRATION NUMBER 3880 ON 2/06/13 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC



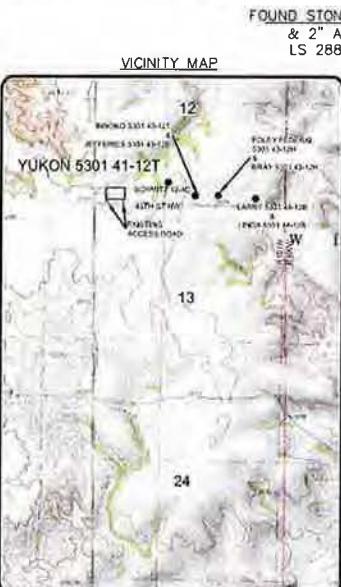
STAKED ON 11/17/11  
 VERTICAL CONTROL DATUM WAS BASED UPON  
 CONTROL POINT 13 WITH AN ELEVATION OF 2090.8'

THIS SURVEY AND PLAT IS BEING PROVIDED AT THE REQUEST OF FABIAN KJORSTAD OF OASIS PETROLEUM I CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

DARYL D. KASEMAN LS-3880



- ✖ - MONUMENT - RECOVERED
- ✗ - MONUMENT - NOT RECOVERED



© 2011, INTERSTATE ENGINEERING, INC.

Plat No.	Date	By	Description
REV 1	11/6/11	JAS	Moved bottom hole
REV 2	12/13/11	JAS	Changed to double pad
REV 3	2/2/13	WBL	Moved bottom hole / changed name

OASIS PETROLEUM NORTH AMERICA, LLC  
 WELL LOCATION PLAT  
 SECTION 12, T153N, R101W  
 MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.A.S. Project No.: S1149-329  
 Checked By: D.D.K. Date: NOV 2011

1/8



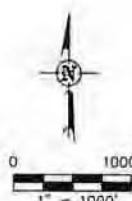
**SECTION BREAKDOWN**  
OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTIONS 12, 13 & 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN, PLS, REGISTRATION NUMBER 3880 ON 2/06/13 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.



ALL AZIMUTHS ARE BASED ON GPS OBSERVATIONS. THE ORIGINAL SURVEY OF THIS AREA FOR THE GENERAL LAND OFFICE (GLO) WAS 1900. THE CORNERS FOUND ARE AS INDICATED AND ALL OTHERS ARE COMPUTED FROM THOSE CORNERS FOUND AND BASED ON GLO. DATA THE MAPPING ANGLE FOR THIS AREA IS APPROXIMATELY -0'03".



- MONUMENT — RECOVERED
- MONUMENT — NOT RECOVERED



© 2011, INTERSTATE ENGINEERING, INC.

2/8



Interstate Engineering, Inc.  
P.O. Box 648  
422 E Main Street  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)

OASIS PETROLEUM NORTH AMERICA, LLC  
SECTION BREAKDOWN  
SECTIONS 12, 13 & 24 T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Recon No.	Date	By	Description
REV 1	12/9/11	JDS	MOVED BOTTOM HOLE
REV 2	12/13/11	JDS	CHANGED TO DOUBLE PIN
REV 3	3/29/12	BEN	MOVED BOTTOM HOLE / CHANGED NAME

Drawn By: J.D.S. Project No.: 511-09-320  
Checked By: D.O.K. Date: NOV 2011

## PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



NOTE: All utilities shown are preliminary only, a complete utilities location is recommended before construction.

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN, PLS, REGISTRATION NUMBER 3880 ON 2/06/13 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.

© 2011, INTERSTATE ENGINEERING, INC.

3/8



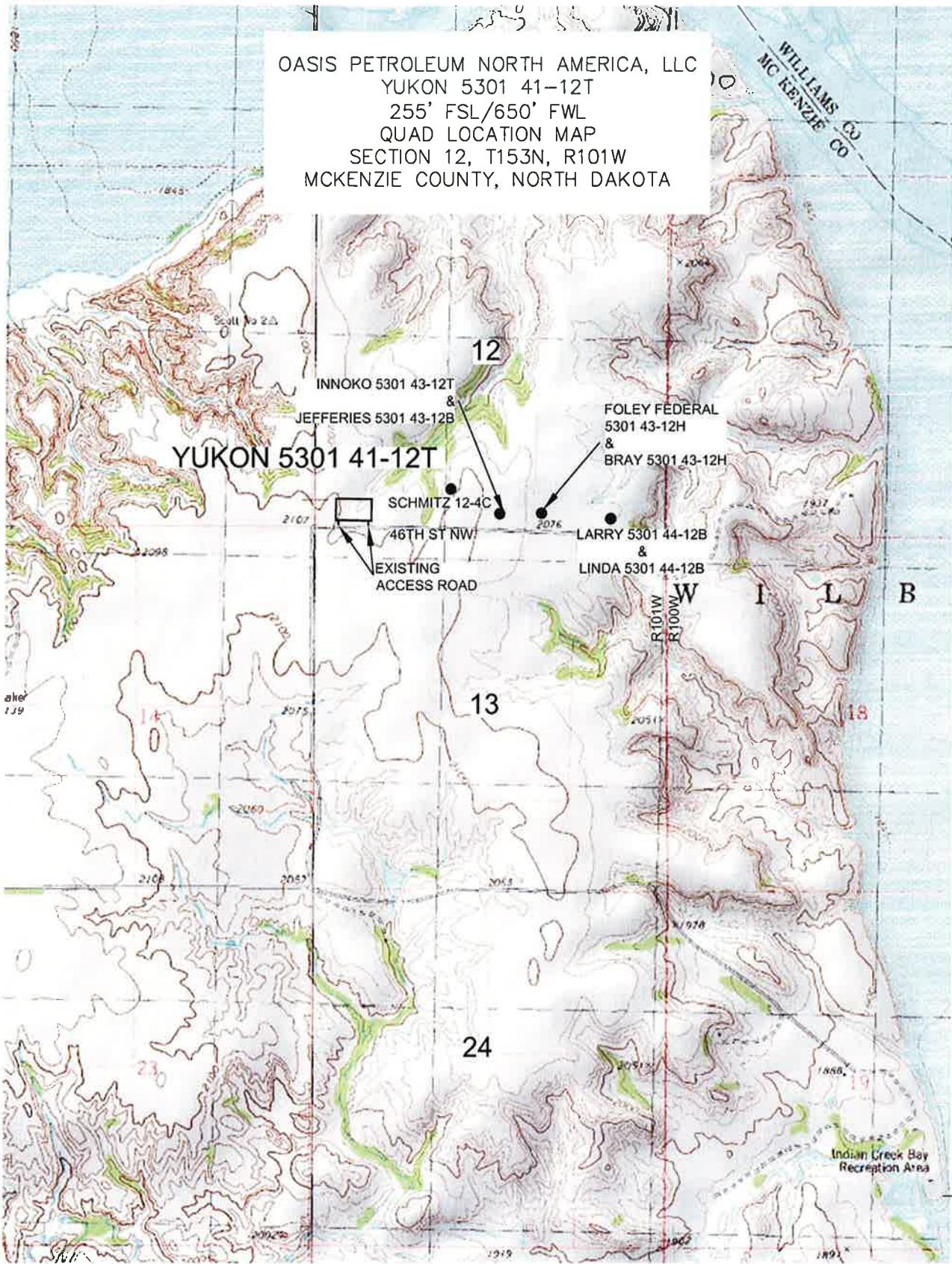
SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
PAD LAYOUT  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-9-339  
Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/9/11	JJS	Moved bottom hole
REV 2	12/13/11	JJS	Changed to double pad
REV 3	8/2/12	JJS	Moved bottom hole / changed name



© 2011, INTERSTATE ENGINEERING, INC.

**5/8**



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
www.Interstateeng.com  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
QUAD LOCATION MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	J.J.S.	Project No.:	S11-09-339
Checked By:	D.D.K.	Date:	NOV 2011

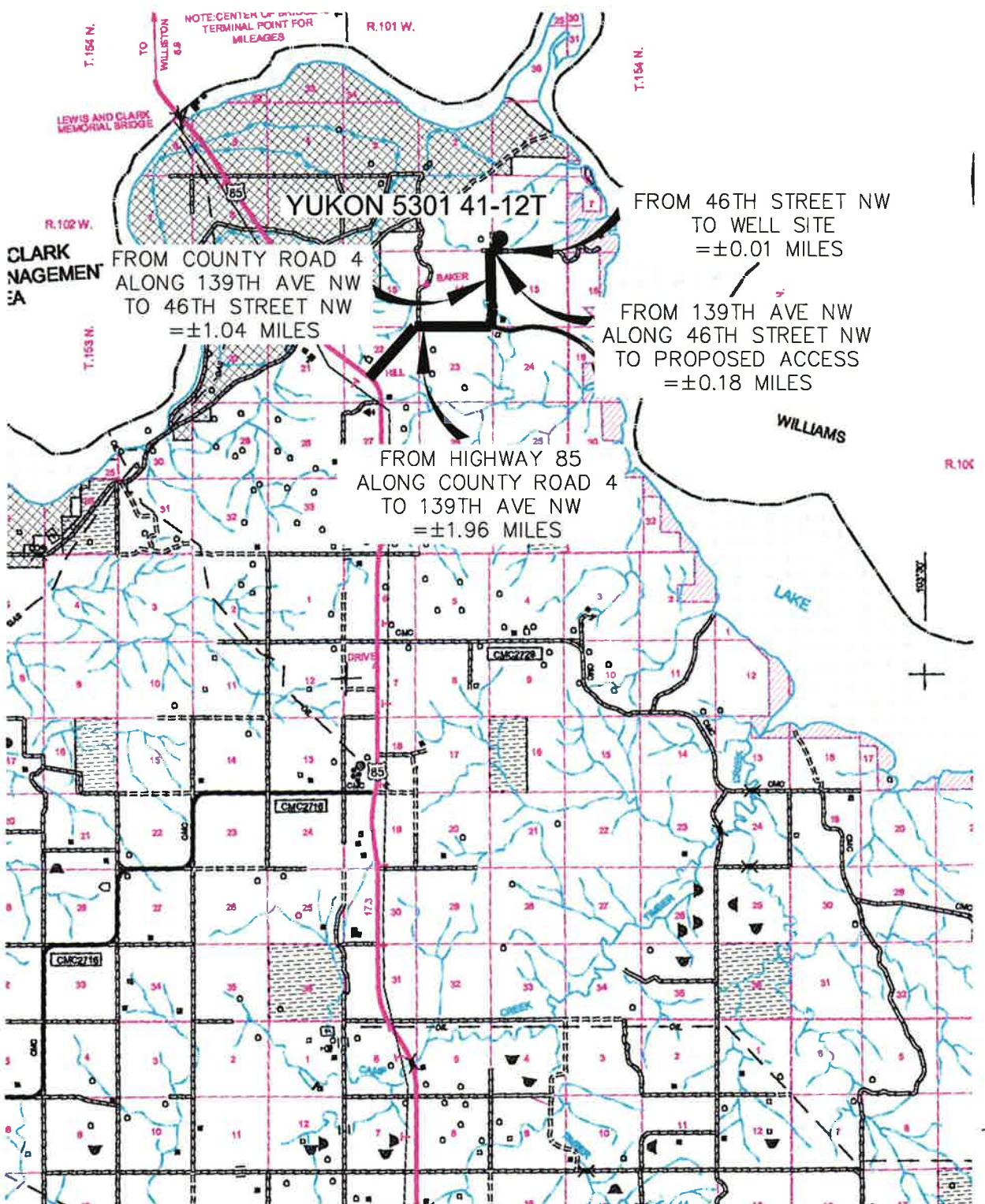
Revision No.	Date	By	Description
REV 1	12/6/11	JJE	Moved bottom hole
REV 2	12/12/11	JJE	Changed to double pad
REV 3	1/9/13	BHE	Moved bottom hole / changes name

# COUNTY ROAD MAP

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002

"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



© 2011, INTERSTATE ENGINEERING, INC.

6/8



Professional plan revised, please you trust

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
COUNTY ROAD MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

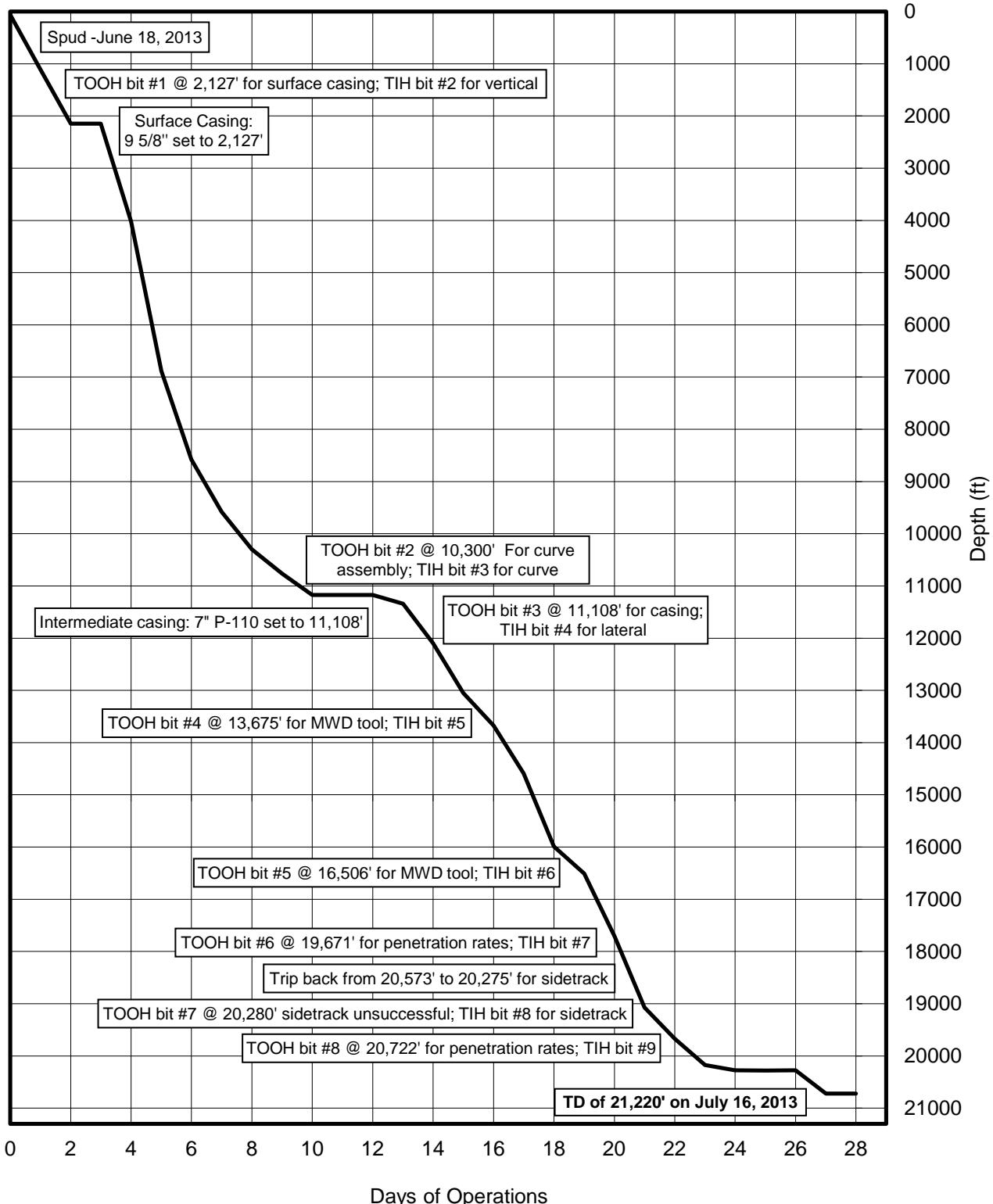
Drawn By: J.J.S. Project No: S11-09-339  
Checked By: D.D.K. Date: NOV 2011

Revision No	Date	By	Description
REV 1	12/8/11	JJS	Moved bottom hole
REV 2	12/13/11	JJS	Changed to double pad
REV 3	2/5/13	BHR	Moved bottom hole / changed name

# TIME VS DEPTH

Oasis Petroleum North America, LLC

Yukon 5301 41-12T



# DAILY DRILLING SUMMARY

Day	Date 2013	Depth (0600 Hrs)	24 Hr Footage	Bit #	WOB (Klbs)	WOB (Klbs)	RPM (RT)	RPM (MM)	PP	SPM 1	SPM 2	GPM	24 Hr Activity	Formation
0	6/18	60'	-	-	-	-	-	-	-	-	-	-	Rig up prepare to spud.	-
1	6/19	1,112'	1,052	1	30	-	160	1650	105	105	739	-	Rig up top drive, prep for drilling. Make up surface tools. Topdrive han leak found all pipes on topdrive had not been tightened at shop, and washpipe leaking. Drill surface 442' to 1,024'. Change out fisher pump in cellar, call tech to fix fisher pump. Drill 1,024' to 1,112'	-
2	6/20	2,147'	1,035	1	30	-	160	1650	105	105	739	-	Drill surface 1,112' to 1,383'. Swap out hydraulic pump units. Drill 1,383' to 2,096' TOH. Drop gyro tool taking survey every 100'. TIH drill 2,096' to 2,147'. Circulate and condition, bottoms up. TOH lay down BHA, lay down 8" collars. Rig up to run casing, run casing. Install swedge, rig down casing crew. Circulate and condition.	-
3	6/21	2,147'	0	1	-	-	-	-	-	-	-	-	Primary cementing PSI test @ 3000 PSI. Cement casing, displace with 165 Bbls OBM. 90 Bbls cement back. Rig down cementers. Top fill with excess cement. Flush out cement lines and hoses. Rig down hydraulic pump unit/hoses/fisher pump. Weatherford rig up hanger head/drilling adapter to BOP. Nipple up BOPS, rig up accumulator, koomey hoses, choke line, rotating head flowline, kill line, cellar covers. Pickup joint 5" drill pipe for testing, put on test tools, wait on tester. Test BOPS, rig up tester, OBM put in the pits @ 1330. Test BOPS. Nipple up BOPS. Center BOP. Bolt up flow line. Wellhead to high flow line against rotary beam. Pick up BHA, directional tools, and bit. TIH. Install rotating head.	Pierre
4	6/22	4,020'	1,873	2	17	17	65	118	3150	70	70	493	Service rig crown and blocks. Downtime top drive/VFD. Drill cement 2,060' to 2,162'. Shoe 2,127'. Fit test @ 2,162'. 225 PSI for 15 min. Drill 2,162' to 4,020'	Pierre
5	6/23	6,881'	2,861	2	25	20	65	118	3450	70	70	493	Drill 1,020' to 4,447' Slide 4,447' to 5,192', Slide 5,192' to 5,202' @ 108 degrees. Drill 5,202 to 6,130' Slide 6,135' to 6,321' W330 degrees. Drill 6,135' to 6,321' Service top drive. Drill 6,321 to 6,505' Slide 6,505 to 6,515'. Suctions kept packing off, cleaned each suction screen 6 times. Drill 6,515' to 6,685'. Downtime mud pump, burnt up wire on #2 pump. Drill 6,685' to 6,798'. Clean suction tank with vac truck. Drill 6,798' to 6,881'.	Dunham Salt
6	6/24	8,581'	1,700	2	25	20	65	118	2900	70	70	493	Drill and survey, sliding as needed, from 6,881'-7,349'. Service rig. Repair flow sensor/paddle. Drill and survey, sliding as needed, from 7,349'-7,721'. Drill and survey from 7,721'. Rig service. Drill and survey from 7,721-8,581'.	Charles
7	6/25	9,584'	1,003	2	35	35	55	118	3000	70	70	493	Drill and survey, sliding as needed, from 8,581'-9,120'. Service rig. Drill and survey, sliding as needed, from 9,120'-9,152'. Rig Service. Drill and survey, sliding as needed, from 9,152'-9,584'.	Mission Canyon
8	6/26	10,300'	716	2	35	-	55	118	3600	70	70	493	Drill and survey from 9,584'-9,959'. Service rig. Drill and survey from 9,959'-10,053'. Rig Service. Additional down time while changing out dies in well control valve. Drill and survey from 10,053-10,300'. Reach KOP. Circulate and condition. Pump dry job. TOH.	Lodgepole

# DAILY DRILLING SUMMARY

Day	Date 2013	Depth (0600 Hrs)	24 Hr Footage	Bit #	WOB (Klbs) RT	WOB (Klbs) MM	RPM (RT)	RPM (MM)	PP	SPM 1	SPM 2	GPM	24 Hr Activity		Formation
9	6/27	10,766'	466	3	20	40	25	143	3600	70	70	493	TOH. Fill pipe. Lay down BHA, pick up curve assembly. TIH. Test MWD. Slip and cut drill line. TIH. Install rotating head and ream through salts. TIH. Log gamma from 9,230'-9,280'. TIH. Rig service. Orientate curve and survey from 10,300'-10766'.		Lower Bakken Shale
10	6/28	11,173'	407	3	23	35	30	143	3250	70	70	493	Orientate curve and survey, rotating as needed, from 10766'-11,173'. Reach intermediate casing point. Circulate and condition mud. TOH. Lay down BHA. Break bit, lay out directional tools. Pick up BHA. Make up reamer assembly. TIH to KOP 10,340'. Reaming/washing from 10,340' to 10,819'.		Three Forks
11	6/29	11,173'	0	3	-	-	0	-	-	-	-	0	Reaming washing from 10,819' to 11,150'. TOH to 10,819'. TIH to 11,150'. Pump dry job. Lay down drill pipe, collars heavy weight, reamers. Pull wear bushing. Rig up to run casing. Rig up casing crew. Run casing. Put on cr tool, fill casing. Run casing		Three Forks
12	6/30	11,173'	0	3	-	-	0	-	-	-	-	0	Run casing, filling with CRT tool. Pumping as needed. Rig down casing crew. Lost circulation, working pipe to restore circulation. Cased hole logs wireline to perforate casing. Perforate casing. Circulate and condition. Rig up cementers. Held safety meeting. Cement. Rig down cementers. Waiting on cement.		Three Forks
13	7/1	11,342'	169	4	15	20	35	138	2200	80	-	282	Rig down cement head. Pick up lateral BHA. TIH 10 stands. Change tools to pick up 4" drill pipe. Install wear bushing. Test MWD tool. Slip and cut drill line. Rig service. Pick up drill pipe. Change saver sub, install rotating head. Test casing. Drill cement from 10,619'-11,125'. Drill and survey 6" lateral from 11,173'-11,342'.		Three Forks
14	7/2	12,096'	754	4	20	27	35	138	2300	84	-	282	Drill and survey 6" lateral from 11,342'-11,529'. Rig service. Drill and survey, sliding as needed, from 11,529'-12,096'.		Three Forks
15	7/3	13,054'	958	4	20	60	30	138	2600	-	84	282	Drill and survey 6" lateral from 12,096'-12,518'. Rig service. Drill and survey 6" lateral from 12,518'-13,054'		Three Forks
16	7/4	13,675'	621	4	20	60	30	138	2600	-	84	282	Drill and survey 6" lateral from 13,054'-13,508'. Rig Service. Drill and survey 6" lateral from 13,508'-13,675'. Trouble shoot MWD tool. Circulate and condition, mix and send slug. TOH Service rig. TOH, pull RHR/wear bushing, and install trip nipple. Lay down BHA.		Three Forks
17	7/5	14,590'	915	5	20	20	30	138	3000	-	84	282	Pick up BHA. TIH. Install wear bushing. Re-log gamma. Drill and survey lateral from 13,675'-14,590'.		Three Forks
18	7/6	15,990'	1,400	5	23	72	30	138	3600	84	-	282	Drill and survey from 14,590' to 15,196', Rig service, Drill and survey from 15,196' to 15,990'.		Three Forks
19	7/7	16,506'	516	5	23	80	30	138	3700	84	-	282	Drill 15,990'-16,506'. Circulate an condition, build dry job, fill trip tanks, pump dry job. TOH. TOH and remove wear bushing. Lay down BHA. Pick up BHA. TIH and install wear bushing. Cut drilling line.		Three Forks
20	7/8	17,704'	1,198	6	28	65	30	138	3900	84	84	282	Slip and cut, Trip in hole, Install rot rubber, Tool retenation, relog gamma from 16,506' to 17,049', Rig service, Drill from 17,049'-17,704'		Three Forks

## DAILY DRILLING SUMMARY

Day	Date 2013	Depth (0600 Hrs)	24 Hr Footage	Bit #	WOB (Klbs) RT	WOB (Klbs) MM	RPM (RT)	RPM (MM)	PP	SPM 1	SPM 2	GPM	24 Hr Activity		Formation
21	7/9	19,070'	1,366	6	28	50	30	138	3900	80	-	282	Drill and survey lateral from 17,704'-18,400'. Rig service. Drill and survey lateral from 18,400'-19,070'.		Three Forks
22	7/10	19,671'	601	6	28	50	30	138	3900	80	-	282	Drill and survey lateral from 19,070'-19,587'. Service top drive. Drill and survey from 19,587'-19,671'. TOOH. Lay down BHA. Pick up BHA. TIH and test tool.		Three Forks
23	7/11	20,175'	504	7	22	80	30	145	3500	-	84	296	TIH. Install wear bushing and rotating rubber. Drill and survey lateral from 19,671'-19,785'. Rig service. Drill and survey lateral from 19,785'-20,175'.		Three Forks
24	7/12	20,275'	100	7	26	55	50	141	1730	71	-	251	Drill and survey lateral from 20,176'-20,574'. Circulate bottoms up. After discovering the well-bore came in contact with the Pronghorn, the decision was made to side-track. Rack pipe back in preparation to side-track. Trough. Time drill at 20,275'.		Three Forks
25	7/13	20,280'	5	7	-	30	-	127	2800	-	74	260	Time drill at 20,275'-20,280'. Attempt to kick off side-track. Circulate and condition. Pump pill. TOOH. Service rig. ToH, remove RHR and wear bushing. Install trip nipple. Lay down BHA. Pick up BHA. TIH install wear bushing. Pick up shock sub and agitator. TIH.		Three Forks
26	7/14	20,276'	-4	8	-	30	-	127	2800	70	-	260	Cut drilling line, 15 wraps. TIH install rotating rubber. Fill pipe. Shoot surveys, prep for sidetrack. Slide drilling, building trough. Slide drilling time drilling 20,265' to 20,276'.		Three Forks
27	7/15	20,722'	446	8	22	20	30	128	4000	-	70	246	Time drilling side-track from 20,276'-20,282'. Drill and survey lateral from 20,282'-20,534'. Rig service. Drill and survey lateral from 20,534'-20,722'. Circulate and condition, pump pill. TOH Remove RHR and wear bushing, install trip nipple and lay down agitator and shock sub. Lay down BHA. TIH pick up reamer assembly TIH		Three Forks
28	7/16	20,722'	0	9	-	-	-	-	-	-	-	-	TIH. Install secondary wear bushing. TIH. Ream in hole from 13,395'-13,670'. TIH to 14,529'. RIH from 14,529'-14,622'. TIH to 15,061'. RIH from 15,061'-15,190'. TIH to 16,054'. RIH to 16,420'. TIH to 17,81'. RIH to 17,176'. TIH to 17,704'. RIH to 20,620'.		Middle Bakken
29	7/17	21,230'	508	9	20	20	30	128	3600	74	-	260	Drill 20,722' to 21,220 TD Circulate and condition		Bakken

# DAILY MUD SUMMARY

Day	Date	Mud Depth	Mud Wt (ppg)	VIS (sec/ qt)	PV (cP)	YP (lbs/ 100 ft <sup>2</sup> )	Gels (lbs/ 100 ft <sup>2</sup> )	600/ 300	NAP/ H <sub>2</sub> O (ratio)	NAP/ H <sub>2</sub> O (%) by vol)	Cake/ API/ HTHP	Cor. Solids (%)	Oil/ H <sub>2</sub> O (%)	pH	Excess Lime (lb/bbl)	Cl <sup>-</sup> (mg/L)	HGS/ LGS (%)	Salinity (ppm)	ES	Gain/ Loss (bbls)
0	06/18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	06/19	1,046'	8.65	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	06/20	1,384'	8.65	29	2	1	3/5	5/3	-	0/98	-	-	-	-	8	-	1,300	0.4/1.5	-	
3	06/21	1,384'	8.65	29	2	1	3/5	5/3	-	0/98	-	-	-	8	-	1,300	0.4/1.5	-		
4	06/22	2,147'	9.6	94	25	3	11/18	53/28	71/6/28.4	63/25	3	9.9	63/25	1.6	-	2.1	34k	6.7/3.2	264,320	
5	06/23	5,068'	9.6	70	24	12	10/19	60/36	70/8/29.2	63/26	3	9.7	63/26	1.8	-	2.3	22k	7.5/2.2	126,656	
6	06/24	7,305'	9.75	56	20	10	8/13	50/30	76.1/23.9	67/21	3	10.7	67/21	1.8	-	2.3	21k	8.3/2.4	141,484	
7	06/25	9,152'	9.85	43	16	8	6/12	40/24	85.1/14.9	74/13	3	11.3	74/13	1.5	-	1.9	29k	8.9/2.0	185,390	
8	06/26	9,779'	10.2	45	17	9	8/2	43/26	84.9/15.1	73/13	3	12.7	73/13	1.8	-	2.3	22k	10.3/2.4	205,701	
9	06/27	10,300'	10.5	68	24	13	9/5	61/37	79.5/20.5	66/17	3	15.7	66/17	1.2	-	1.6	21k	9.7/6	210,245	
10	06/28	10,956'	10.3	45	16	10	8/12	42/26	86/14	74/12	3	12.8	74/12	1.7	-	2.20	19k	10.9/1.9	155,540	
11	06/29	11,173'	10.4	53	24	13	10/15	61/37	84.7/15.3	73/13	3	13.4	73/13	1.5	-	1.9	26k	11.0/2.4	263,117	
12	06/30	11,173'	10.55	64	17	10	7/42	44/27	85.9/14.1	73/12	3	13.7	73/12	1.5	-	1.9	21k	11.7/2.0	210,245	
13	07/01	11,173'	9.8	28	1	1	1/1/-	3/2	-	6/83.3	-	-	-	-	9	-	161k	0.1/1.7	-	
14	07/02	11,412'	9.65	28	1	1	1/1/-	3/2	-	6/84.3	-	-	-	-	9.5	-	151k	0.0/1.3	-	
15	07/03	11,412'	9.65	28	1	1	1/1/-	3/2	-	6/84.3	-	-	-	-	9.5	-	151k	0.0/1.3	-	
16	07/04	13,158'	9.5	28	1	1	1/1/-	3/2	-	5/86.4	-	-	-	-	8.5	-	150k	0.0/0.9	-	
17	07/05	13,675'	9.8	27	1	1	1/1/-	3/2	2.2/97.8	2/88.2	-	0.8	-	-	9	-	157k	0/0	223,653	
18	07/06	13,675'	9.8	27	1	1	1/1/-	3/2	2.2/97.8	2/88.2	-	0.8	-	-	9	-	157k	0/0	223,653	
19	07/07	16,320'	9.75	27	1	1	1/1/-	3/2	1.1/98.9	1/88.5	-	0	-	-	8.5	-	178k	0/0	236,830	
20	07/08	16,320'	9.75	27	1	1	1/1/-	3/2	1.1/98.9	1/88.5	-	0	-	-	8.5	-	178k	0/0	236,830	
21	07/09	18,005'	10	27	1	1	1/1/-	3/2	1.1/98.9	1/87	-	2.7	-	-	9	-	164k	-2.3/5.9	235,140	
22	07/10	18,005'	10	27	1	1	1/1/-	3/2	1.1/98.9	1/87	-	2.7	-	-	9	-	164k	-2.3/5.9	235,140	
23	07/11	19,671'	9.85	27	1	1	1/1/-	3/2	0/100	0/90	-	0.4	-	-	8.5	-	167k	-0.1/0.4	232,617	
24	07/12	19,671'	9.85	27	1	1	1/1/-	3/2	0/100	0/90	-	0.4	-	-	8.5	-	167k	-0.1/0.4	232,617	
25	07/13	19,671'	9.85	27	1	1	1/1/-	3/2	0/100	0/90	-	0.4	-	-	8.5	-	167k	-0.1/0.4	232,617	
26	07/14	20,282'	9.9	28	1	1	1/1/-	3/2	0/100	0/90	-	0.7	-	-	9.5	-	165k	0.3/0.6	229,914	
27	07/15	20,291'	9.9	27	1	1	1/1/-	3/2	1.1/98.9	1/88	-	1.2	-	-	8	-	067k	-0.1/1.3	237,117	
28	07/16	20,291'	9.9	27	1	1	1/1/-	3/2	1.1/98.9	1/88	-	1.2	-	-	8	-	067k	-0.1/1.3	237,117	
29	07/17	20,291'	9.9	27	1	1	1/1/-	3/2	1.1/98.9	1/88	-	1.2	-	-	8	-	067k	-0.1/1.3	237,117	

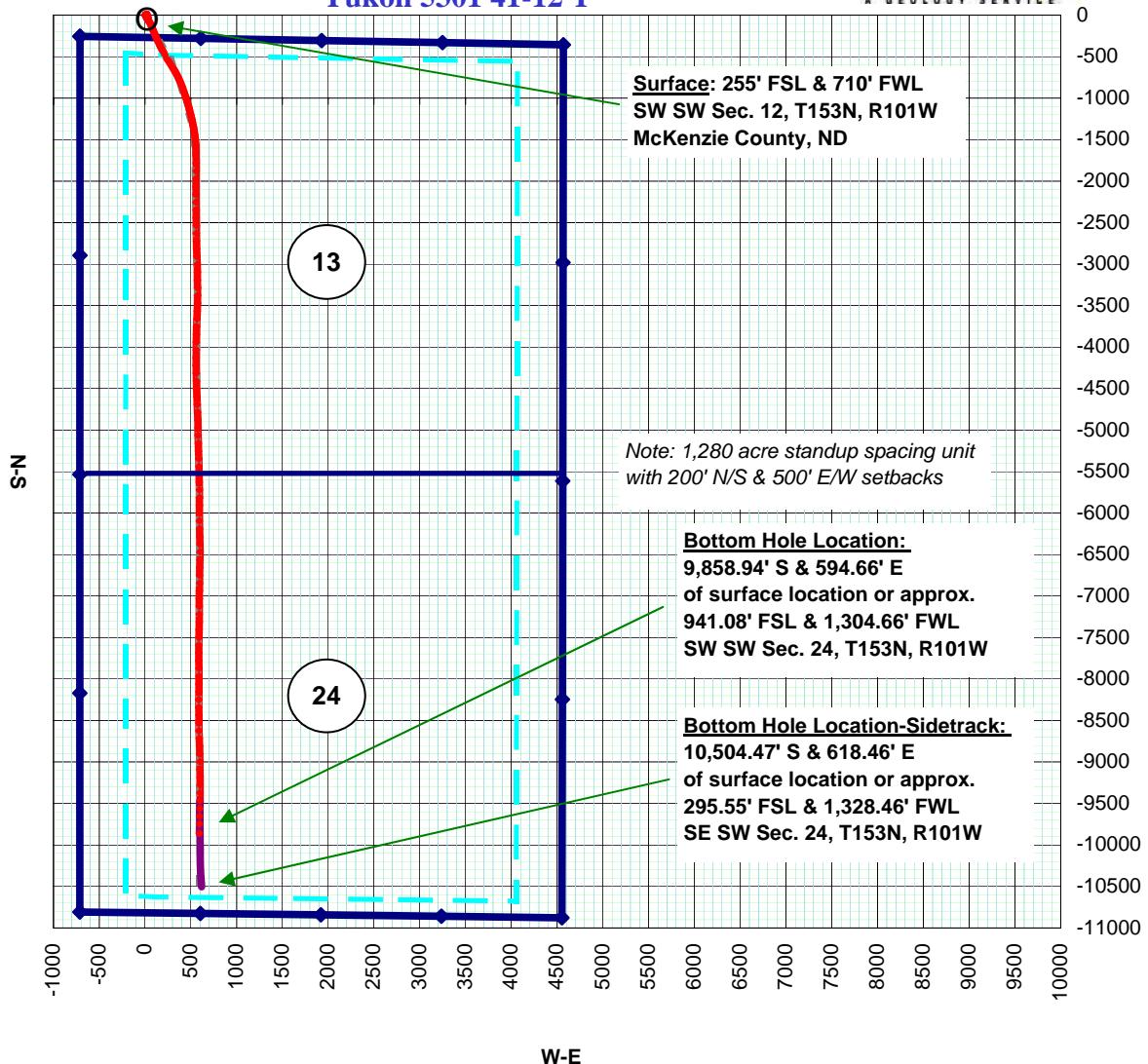
Change from Invert to Saltwater gel

## BOTTOM HOLE ASSEMBLY RECORD

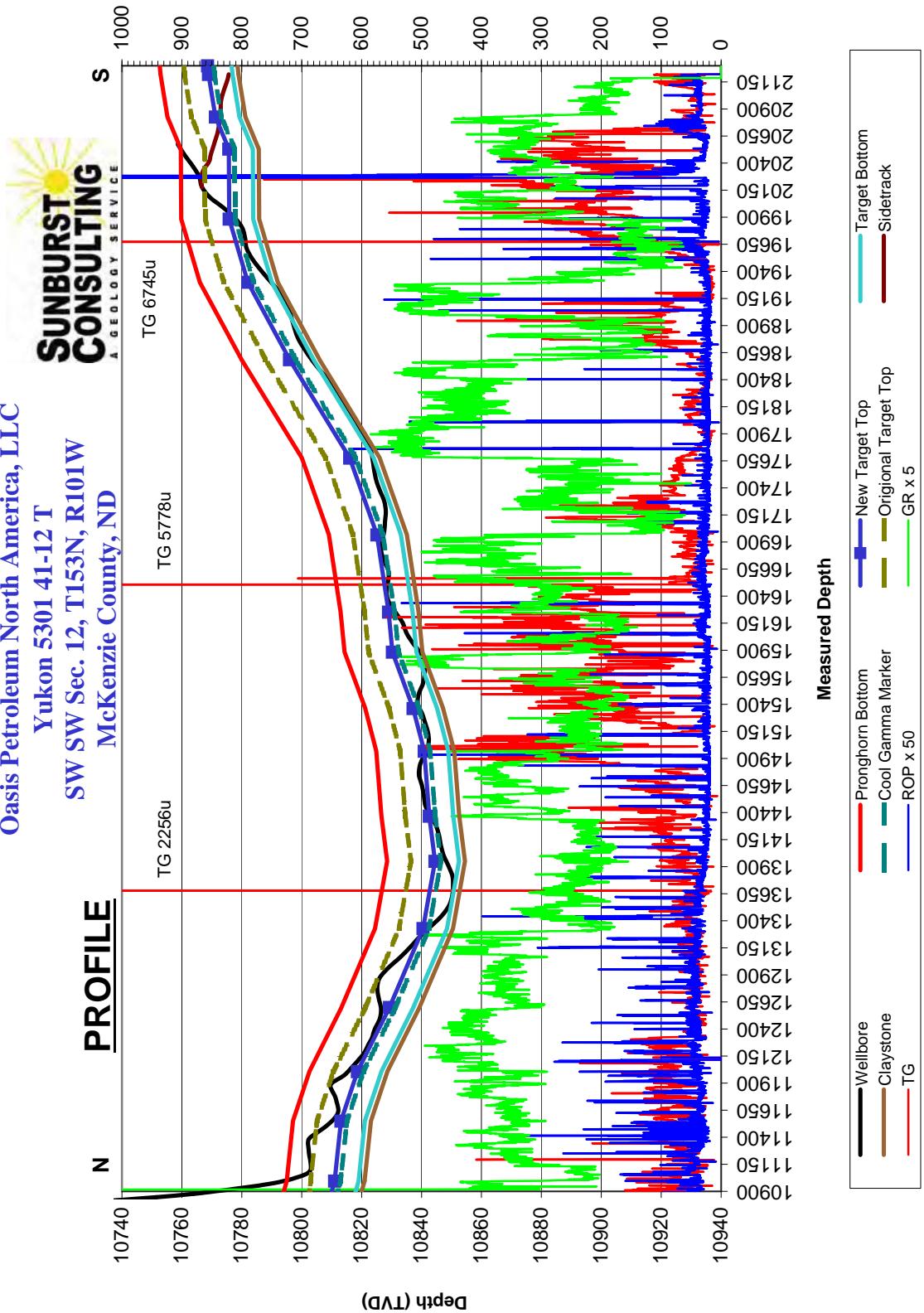
BHA Run	Depth In	Depth Out	Footage	Hours	Accum. Hours	Vert. Dev.	Bit Data					Motor Data					
							Bit #	Size (in.)	Type	Make	Model	Serial #	Jets	Hours	Motor #	Make	
1	60'	2,127'	2,067'	20	20.00	Surface	1	13 1/2	Tri-cone	Re-tip	-	-	-	20	-	-	
2	2,127'	10,300'	8,173'	65	85.00	Vertical	2	8 3/4	PDC	Security	FX55D	12101528	6x18	65	1	Hunting	7/8 5.7
3	10,300'	11,173'	873'	22.5	107.50	Curve	3	8 3/4	PDC	Security	MMD55M	12194061	5x20	22.5	2	NOV	7/8 5.0
4	11,173'	13,675'	2,502'	65	172.50	Lateral	4	6	PDC	Security	MMD64D	12227992	6x18	65	3	Baker	XL/XL
5	13,675'	16,506'	2,831'	47	219.50	Lateral	5	6	PDC	Smith	MDSI613QBFX	JG9416	6x16	47	4	Baker	XLLS
6	16,506'	19,671'	3,165'	56	275.50	Lateral	6	6	PDC	Smith	MDSI613QBFX	JG9286	6x16	56	5	Baker	XLLS
7	19,671'	20,573'	902'	23	298.50	Lateral	7	6	PDC	Varel	VM613P2	4004810	6x20	23	6	Baker	XLLS
7	20,275'	20,280'	5'	21	319.50	Sidetrack	7	6	PDC	Varel	VM613P3	4004810	6x20	21	6	Baker	XLLS
8	20,265'	20,722'	457'	27	346.50	Sidetrack lateral	8	6	PDC	Smith	MDSI613	JG9430	6x16	27	7	NOV	7/8 3.8
9	20,722'	21,220'	498'	8.5	355.00	Lateral	9/RR4	6	PDC	Security	MMD64D	12227992	6x18	8.5	7	Baker	XLLS
															1.50°	8.5	
															Rev/Gal	0.49	

## PLAN VIEW

Oasis Petroleum North America, LLC  
Yukon 5301 41-12 T



Oasis Petroleum North America, LLC  
 Yukon 5301 41-12 T  
 SW SW Sec. 12, T153N, R101W  
 McKenzie County, ND



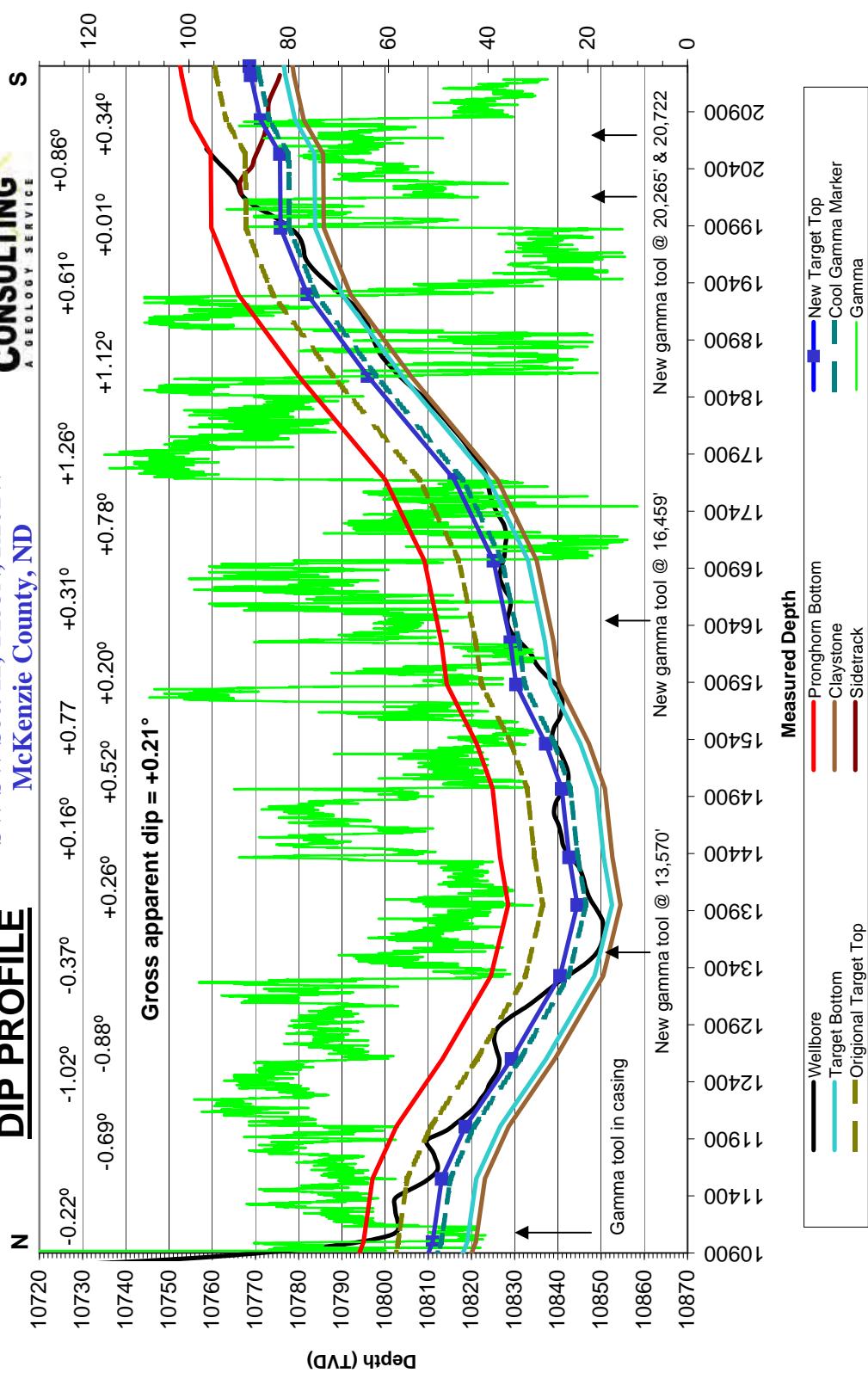
# FORMATION MARKERS & DIP ESTIMATES

*Oasis Petroleum North America, LLC - Yukon 5301 41-12 T*

Dip Change Points	MD	TVD	TVD diff.	MD diff.	Dip	Dipping up/down	Type of Marker
<b>Marker</b>							
Entry	10,996'	10,811.00					
Low gamma #1	11,550'	10,813.10	2.10	554.00	-0.22	Down	Gamma
Low gamma #1	12,007'	10,818.60	5.50	457.00	-0.69	Down	Gamma
Low gamma #2	12,600'	10,829.30	10.70	593.00	-1.03	Down	Gamma
Low gamma #2	13,329'	10,840.50	11.20	729.00	-0.88	Down	Gamma
Low gamma #2	13,950'	10,844.50	4.00	621.00	-0.37	Down	Gamma
Top of zone	14,367'	10,842.60	-1.90	417.00	0.26	Up	Gamma
Top of zone	14,967'	10,840.90	-1.70	600.00	0.16	Up	Gamma
Low gamma #2	15,362'	10,837.30	-3.60	395.00	0.52	Up	Gamma
Claystone	15,882'	10,830.30	-7.00	520.00	0.77	Up	Gamma
Low gamma #2	16,253'	10,829.00	-1.30	371.00	0.20	Up	Gamma
Low gamma #2	16,966'	10,825.10	-3.90	713.00	0.31	Up	Gamma
Base of zone	17,675'	10,816.05	-9.05	709.00	0.73	Up	Gamma
Claystone	18,586'	10,796.00	-20.05	911.00	1.26	Up	Gamma
Claystone	19,300'	10,782.00	-14.00	714.00	1.12	Up	Gamma
Low gamma #2	19,883'	10,775.80	-6.20	583.00	0.61	Up	Gamma
Pronghorn	20,530'	10,775.67	-0.13	647.00	0.01	Up	Gamma
Low gamma #2	20,827'	10,771.20	-4.47	297.00	0.86	Up	Gamma
TD	21,220'	10,768.90	-2.30	393.00	0.34	Up	Gamma
<b>Gross Dip</b>							
Initial Target Contact	10,996'	10,807.00					
Projected Final Target Contact	21,220'	10,768.90	-38.10	10224.00	0.21	Up	Projection

Oasis Petroleum North America, LLC  
 Yukon 5301 41-12 T  
 SW SW Sec. 12, T153N, R101W  
 McKenzie County, ND

## DIP PROFILE



&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	Ryan Energy Services
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE			DLS/		
			AZM	TVD	N-S	E-W	SECT	100
Tie	2084.36	0.30	44.47	2084.34	0.86	3.07	-0.67	0.00
1	2166.00	1.00	91.70	2165.97	0.99	3.93	-0.77	1.01
2	2259.00	1.20	101.40	2258.96	0.77	5.70	-0.46	0.29
3	2352.00	1.50	102.40	2351.93	0.32	7.84	0.12	0.32
4	2446.00	1.50	104.40	2445.90	-0.25	10.23	0.82	0.06
5	2539.00	1.80	99.60	2538.86	-0.80	12.85	1.51	0.35
6	2632.00	1.60	92.40	2631.82	-1.09	15.59	1.96	0.31
7	2725.00	1.80	93.50	2724.78	-1.24	18.35	2.26	0.22
8	2819.00	1.60	81.20	2818.74	-1.13	21.12	2.30	0.44
9	2912.00	1.20	358.20	2911.72	0.05	22.37	1.20	2.02
10	3006.00	1.50	0.00	3005.69	2.26	22.34	-1.01	0.32
11	3099.00	1.60	318.50	3098.66	4.45	21.48	-3.24	1.19
12	3192.00	2.00	316.80	3191.61	6.60	19.51	-5.51	0.43
13	3285.00	0.80	331.80	3284.59	8.36	18.09	-7.34	1.34
14	3379.00	0.40	10.60	3378.58	9.26	17.84	-8.25	0.58
15	3472.00	0.50	341.20	3471.58	9.96	17.77	-8.96	0.27
16	3565.00	0.50	352.10	3564.57	10.75	17.58	-9.75	0.10
17	3659.00	0.40	352.50	3658.57	11.48	17.48	-10.49	0.11
18	3752.00	0.40	1.10	3751.57	12.13	17.45	-11.14	0.06
19	3845.00	0.30	326.20	3844.57	12.66	17.32	-11.67	0.25
20	3939.00	0.10	260.60	3938.57	12.85	17.10	-11.87	0.29
21	4032.00	0.10	327.90	4031.57	12.90	16.98	-11.93	0.12
22	4126.00	0.20	269.50	4125.57	12.97	16.77	-12.01	0.18
23	4219.00	0.10	276.90	4218.57	12.98	16.53	-12.04	0.11
24	4312.00	0.30	333.80	4311.57	13.21	16.34	-12.27	0.28
25	4406.00	0.20	355.60	4405.56	13.59	16.22	-12.66	0.15
26	4499.00	1.10	187.50	4498.56	12.87	16.09	-11.95	1.39
27	4592.00	1.00	192.70	4591.54	11.19	15.79	-10.29	0.15
28	4686.00	0.90	226.90	4685.53	9.89	15.07	-9.03	0.60
29	4779.00	0.40	303.40	4778.53	9.57	14.27	-8.75	0.96
30	4872.00	0.80	309.60	4871.52	10.16	13.50	-9.39	0.44
31	4965.00	0.50	301.90	4964.52	10.79	12.65	-10.06	0.34
32	5058.00	0.10	294.80	5057.51	11.04	12.23	-10.34	0.43
33	5151.00	0.10	199.90	5150.51	10.99	12.13	-10.30	0.16
34	5244.00	1.80	187.60	5243.50	9.47	11.91	-8.79	1.83
35	5338.00	2.00	176.20	5337.45	6.37	11.83	-5.70	0.45

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	
Ryan Energy Services	
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE			N-S	E-W	SECT	DLS/ 100
			AZM	TVD					
36	5431.00	1.50	164.90	5430.40	3.57	12.25	-2.88	0.65	
37	5524.00	1.10	164.70	5523.38	1.54	12.80	-0.82	0.43	
38	5618.00	1.30	169.20	5617.36	-0.38	13.24	1.12	0.24	
39	5711.00	1.70	166.10	5710.33	-2.76	13.77	3.52	0.44	
40	5804.00	1.50	169.70	5803.29	-5.29	14.32	6.08	0.24	
41	5898.00	1.50	182.40	5897.26	-7.73	14.49	8.53	0.35	
42	5991.00	1.70	177.80	5990.22	-10.33	14.49	11.12	0.26	
43	6084.00	1.60	176.10	6083.18	-13.00	14.63	13.80	0.12	
44	6178.00	1.30	173.00	6177.15	-15.37	14.85	16.17	0.33	
45	6271.00	1.60	167.80	6270.12	-17.68	15.25	18.51	0.35	
46	6364.00	2.70	154.20	6363.06	-20.93	16.48	21.81	1.30	
47	6458.00	2.00	151.50	6456.98	-24.36	18.23	25.34	0.75	
48	6551.00	1.20	160.10	6549.94	-26.70	19.33	27.74	0.90	
49	6644.00	2.00	159.30	6642.90	-29.14	20.24	30.22	0.86	
50	6737.00	1.60	164.60	6735.86	-31.91	21.16	33.04	0.47	
51	6830.00	1.00	146.20	6828.83	-33.83	21.95	35.00	0.78	
52	6924.00	1.00	139.20	6922.82	-35.13	22.94	36.36	0.13	
53	7017.00	0.50	72.00	7015.81	-35.62	23.86	36.90	1.00	
54	7110.00	0.80	61.10	7108.81	-35.18	24.82	36.51	0.35	
55	7204.00	0.80	49.80	7202.80	-34.44	25.89	35.83	0.17	
56	7298.00	1.00	45.80	7296.79	-33.45	26.98	34.90	0.22	
57	7391.00	0.80	57.30	7389.77	-32.53	28.11	34.05	0.29	
58	7484.00	1.00	62.00	7482.76	-31.80	29.37	33.39	0.23	
59	7577.00	0.80	66.20	7575.75	-31.16	30.68	32.82	0.23	
60	7671.00	0.90	21.00	7669.74	-30.20	31.55	31.92	0.70	
61	7764.00	1.00	328.10	7762.73	-28.83	31.38	30.54	0.92	
62	7857.00	1.60	325.50	7855.71	-27.07	30.22	28.72	0.65	
63	7950.00	1.50	320.00	7948.67	-25.07	28.70	26.63	0.19	
64	8044.00	1.90	323.30	8042.63	-22.88	26.98	24.35	0.44	
65	8137.00	1.70	327.50	8135.58	-20.48	25.31	21.86	0.26	
66	8230.00	1.40	322.50	8228.55	-18.41	23.88	19.72	0.35	
67	8323.00	1.20	313.90	8321.53	-16.84	22.49	18.07	0.30	
68	8417.00	1.20	319.40	8415.51	-15.41	21.14	16.56	0.12	
69	8510.00	1.30	319.60	8508.48	-13.86	19.82	14.95	0.11	
70	8603.00	1.60	318.30	8601.45	-12.09	18.27	13.09	0.32	
71	8696.00	1.80	323.30	8694.41	-9.95	16.54	10.86	0.27	

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	
Ryan Energy Services	
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE				SECT	DLS/100
			AZM	TVD	N-S	E-W		
72	8790.00	1.30	321.50	8788.38	-7.93	14.99	8.76	0.53
73	8883.00	0.80	308.00	8881.36	-6.71	13.82	7.47	0.60
74	8976.00	0.90	322.00	8974.35	-5.73	12.86	6.44	0.25
75	9070.00	1.20	325.90	9068.34	-4.34	11.85	4.99	0.33
76	9163.00	0.50	310.80	9161.33	-3.26	11.00	3.87	0.78
77	9256.00	0.30	307.10	9254.32	-2.85	10.50	3.43	0.22
78	9349.00	0.20	271.70	9347.32	-2.70	10.14	3.26	0.19
79	9443.00	0.30	308.70	9441.32	-2.54	9.79	3.08	0.20
80	9536.00	0.40	304.10	9534.32	-2.21	9.33	2.72	0.11
81	9629.00	0.40	308.40	9627.32	-1.82	8.80	2.31	0.03
82	9723.00	0.30	304.40	9721.32	-1.48	8.34	1.94	0.11
83	9816.00	0.50	276.50	9814.31	-1.30	7.74	1.73	0.29
84	9909.00	0.30	277.50	9907.31	-1.22	7.10	1.61	0.22
85	10003.00	0.30	303.40	10001.31	-1.05	6.65	1.42	0.14
86	10096.00	0.50	325.00	10094.31	-0.59	6.21	0.93	0.27
87	10189.00	0.70	335.60	10187.30	0.26	5.74	0.06	0.25
88	10250.00	0.80	334.30	10248.30	0.99	5.40	-0.68	0.17
89	10286.00	0.70	334.90	10284.29	1.41	5.20	-1.12	0.28
90	10317.00	0.50	330.10	10315.29	1.70	5.05	-1.42	0.66
91	10348.00	1.80	157.40	10346.29	1.37	5.17	-1.08	7.41
92	10379.00	5.90	163.70	10377.21	-0.61	5.81	0.93	13.28
93	10410.00	10.20	161.00	10407.90	-4.74	7.15	5.13	13.92
94	10441.00	14.50	161.00	10438.18	-11.00	9.31	11.51	13.87
95	10472.00	17.90	160.60	10467.94	-19.17	12.15	19.82	10.97
96	10503.00	21.50	156.00	10497.12	-28.86	16.05	29.71	12.64
97	10535.00	24.60	151.20	10526.57	-40.05	21.64	41.20	11.32
98	10566.00	27.20	147.60	10554.45	-51.69	28.55	53.21	9.80
99	10597.00	30.70	147.50	10581.57	-64.35	36.60	66.30	11.29
100	10628.00	34.30	150.70	10607.72	-78.65	45.13	81.05	12.87
101	10659.00	38.00	154.10	10632.75	-94.86	53.58	97.70	13.57
102	10690.00	41.20	157.10	10656.63	-112.86	61.72	116.12	12.02
103	10721.00	45.40	158.60	10679.19	-132.54	69.73	136.23	13.95
104	10752.00	49.60	159.60	10700.13	-153.89	77.87	158.00	13.76
105	10784.00	54.50	160.00	10719.80	-177.57	86.58	182.13	15.34
106	10815.00	59.20	159.40	10736.75	-201.90	95.58	206.92	15.25
107	10846.00	63.70	158.70	10751.56	-227.33	105.32	232.85	14.65

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	
Ryan Energy Services	
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE				SECT	DLS/ 100
			AZM	TVD	N-S	E-W		
108	10877.00	69.60	157.90	10763.84	-253.76	115.84	259.83	19.18
109	10908.00	73.80	156.90	10773.57	-280.92	127.15	287.58	13.89
110	10939.00	74.60	156.40	10782.01	-308.31	138.98	315.58	3.01
111	10970.00	77.80	156.90	10789.41	-335.94	150.91	343.84	10.44
112	11001.00	82.00	156.30	10794.84	-363.94	163.03	372.48	13.68
113	11032.00	83.20	156.40	10798.84	-392.10	175.36	401.28	3.88
114	11063.00	86.20	155.10	10801.70	-420.24	188.03	430.08	10.54
115	11095.00	89.50	154.00	10802.90	-449.11	201.77	459.68	10.87
116	11126.00	89.90	153.20	10803.06	-476.88	215.56	488.17	2.89
117	11195.00	90.50	149.60	10802.82	-537.45	248.58	550.49	5.29
118	11226.00	90.40	149.10	10802.58	-564.12	264.38	578.00	1.64
119	11257.00	90.20	151.00	10802.41	-590.98	279.86	605.68	6.16
120	11291.00	90.10	151.60	10802.33	-620.80	296.19	636.37	1.79
121	11323.00	90.40	151.20	10802.19	-648.90	311.51	665.27	1.56
122	11354.00	90.00	151.90	10802.08	-676.15	326.27	693.31	2.60
123	11385.00	88.60	153.50	10802.46	-703.69	340.49	721.60	6.86
124	11416.00	86.80	155.20	10803.70	-731.61	353.90	750.23	7.98
125	11446.00	86.90	156.90	10805.35	-758.99	366.06	778.24	5.67
126	11476.00	87.20	158.50	10806.89	-786.71	377.43	806.55	5.42
127	11506.00	87.30	160.30	10808.33	-814.76	387.97	835.14	6.00
128	11536.00	87.90	161.50	10809.59	-843.08	397.78	863.97	4.47
129	11567.00	88.00	161.70	10810.70	-872.48	407.55	893.87	0.72
130	11598.00	88.60	161.50	10811.62	-901.88	417.33	923.77	2.04
131	11630.00	89.50	162.80	10812.15	-932.33	427.14	954.72	4.94
132	11660.00	90.20	162.90	10812.23	-961.00	435.99	983.84	2.36
133	11690.00	90.60	162.80	10812.02	-989.66	444.83	1012.95	1.37
134	11722.00	90.60	164.30	10811.68	-1020.35	453.90	1044.10	4.69
135	11752.00	90.40	165.00	10811.42	-1049.28	461.84	1073.42	2.43
136	11784.00	91.00	165.20	10811.03	-1080.20	470.06	1104.76	1.98
137	11815.00	91.20	166.70	10810.43	-1110.27	477.59	1135.20	4.88
138	11847.00	91.00	167.40	10809.82	-1141.45	484.76	1166.73	2.27
139	11878.00	89.90	166.30	10809.58	-1171.63	491.81	1197.26	5.02
140	11908.00	86.90	166.60	10810.41	-1200.78	498.84	1226.76	10.05
141	11939.00	86.20	168.10	10812.28	-1230.97	505.61	1257.28	5.33
142	11970.00	87.30	168.60	10814.04	-1261.29	511.86	1287.89	3.90
143	12000.00	88.10	169.60	10815.24	-1290.72	517.53	1317.60	4.27

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	
Ryan Energy Services	
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE				SECT	DLS/100
			AZM	TVD	N-S	E-W		
144	12031.00	88.20	170.10	10816.24	-1321.22	522.99	1348.35	1.64
145	12062.00	88.00	170.10	10817.27	-1351.74	528.32	1379.12	0.65
146	12094.00	88.20	170.50	10818.33	-1383.27	533.71	1410.90	1.40
147	12124.00	88.20	171.70	10819.27	-1412.89	538.34	1440.74	4.00
148	12155.00	88.30	172.30	10820.22	-1443.57	542.66	1471.61	1.96
149	12186.00	88.80	174.10	10821.00	-1474.34	546.33	1502.54	6.02
150	12217.00	89.00	174.90	10821.60	-1505.20	549.30	1533.51	2.66
151	12249.00	89.10	175.40	10822.13	-1537.08	552.00	1565.49	1.59
152	12279.00	88.60	177.30	10822.73	-1567.01	553.91	1595.48	6.55
153	12309.00	89.10	178.30	10823.33	-1596.98	555.06	1625.47	3.73
154	12340.00	89.40	178.70	10823.74	-1627.97	555.87	1656.46	1.61
155	12372.00	89.50	178.70	10824.05	-1659.96	556.60	1688.44	0.31
156	12403.00	88.80	179.20	10824.51	-1690.95	557.17	1719.41	2.77
157	12497.00	89.30	179.80	10826.07	-1784.93	557.99	1813.29	0.83
158	12590.00	90.20	180.70	10826.47	-1877.93	557.58	1906.12	1.37
159	12683.00	90.70	180.60	10825.74	-1970.92	556.53	1998.91	0.55
160	12779.00	89.90	179.90	10825.24	-2066.91	556.11	2094.73	1.11
161	12873.00	89.10	179.70	10826.06	-2160.91	556.44	2188.60	0.88
162	12967.00	87.30	179.70	10829.01	-2254.86	556.93	2282.43	1.91
163	13061.00	88.00	179.30	10832.87	-2348.77	557.75	2376.25	0.86
164	13154.00	88.00	179.30	10836.11	-2441.71	558.88	2469.10	0.00
165	13248.00	88.20	179.60	10839.23	-2535.65	559.79	2562.95	0.38
166	13342.00	87.40	179.50	10842.84	-2629.58	560.52	2656.77	0.86
167	13435.00	88.20	179.30	10846.41	-2722.51	561.50	2749.61	0.89
168	13529.00	88.70	178.20	10848.95	-2816.45	563.55	2843.51	1.29
169	13623.00	89.80	178.10	10850.18	-2910.39	566.58	2937.48	1.18
170	13717.00	89.80	178.10	10850.51	-3004.34	569.70	3031.45	0.00
171	13810.00	90.40	180.20	10850.35	-3097.32	571.08	3124.37	2.35
172	13904.00	91.20	179.20	10849.03	-3191.31	571.57	3218.24	1.36
173	13998.00	90.70	179.00	10847.47	-3285.28	573.04	3312.15	0.57
174	14091.00	90.50	179.80	10846.50	-3378.27	574.02	3405.05	0.89
175	14185.00	90.30	181.50	10845.84	-3472.26	572.95	3498.83	1.82
176	14279.00	90.90	181.90	10844.86	-3566.21	570.16	3592.48	0.77
177	14373.00	91.50	181.90	10842.89	-3660.14	567.05	3686.09	0.64
178	14466.00	90.50	181.90	10841.27	-3753.08	563.96	3778.70	1.08
179	14560.00	90.10	181.40	10840.78	-3847.03	561.26	3872.37	0.68

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	Ryan Energy Services
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE				SECT	DLS/ 100
			AZM	TVD	N-S	E-W		
180	14654.00	90.70	180.00	10840.12	-3941.02	560.11	3966.14	1.62
181	14747.00	90.50	180.70	10839.15	-4034.01	559.54	4058.96	0.78
182	14841.00	89.10	180.90	10839.47	-4128.00	558.23	4152.73	1.50
183	14935.00	89.10	179.50	10840.95	-4221.99	557.90	4246.55	1.49
184	15029.00	89.20	179.00	10842.34	-4315.97	559.13	4340.45	0.54
185	15123.00	90.90	179.00	10842.26	-4409.95	560.77	4434.38	1.81
186	15216.00	90.20	177.80	10841.37	-4502.91	563.37	4527.34	1.49
187	15310.00	91.20	177.40	10840.22	-4596.82	567.30	4621.32	1.15
188	15404.00	90.60	179.40	10838.74	-4690.76	569.93	4715.26	2.22
189	15498.00	89.00	177.10	10839.07	-4784.71	572.80	4809.22	2.98
190	15591.00	89.30	178.80	10840.45	-4877.64	576.13	4902.19	1.86
191	15685.00	90.00	179.20	10841.03	-4971.62	577.77	4996.12	0.86
192	15779.00	90.20	178.90	10840.86	-5065.61	579.32	5090.05	0.38
193	15872.00	91.20	178.60	10839.73	-5158.58	581.35	5182.99	1.12
194	15966.00	92.00	177.90	10837.10	-5252.50	584.22	5276.92	1.13
195	16059.00	90.60	179.00	10834.99	-5345.43	586.74	5369.85	1.91
196	16153.00	91.00	178.70	10833.68	-5439.41	588.62	5463.78	0.53
197	16247.00	91.80	178.70	10831.38	-5533.35	590.75	5557.70	0.85
198	16340.00	90.90	179.10	10829.19	-5626.31	592.54	5650.61	1.06
199	16434.00	90.20	179.80	10828.29	-5720.30	593.44	5744.51	1.05
200	16528.00	89.20	179.40	10828.78	-5814.29	594.10	5838.39	1.15
201	16621.00	90.50	180.80	10829.03	-5907.29	593.94	5931.23	2.05
202	16715.00	91.10	180.10	10827.71	-6001.28	593.20	6025.03	0.98
203	16808.00	90.30	179.10	10826.58	-6094.26	593.85	6117.91	1.38
204	16902.00	89.40	178.60	10826.82	-6188.24	595.73	6211.85	1.10
205	16996.00	89.70	178.80	10827.56	-6282.22	597.87	6305.79	0.38
206	17090.00	90.00	178.90	10827.81	-6376.20	599.75	6399.73	0.34
207	17183.00	89.70	180.40	10828.05	-6469.19	600.32	6492.62	1.64
208	17277.00	90.90	180.70	10827.56	-6563.18	599.42	6586.41	1.32
209	17370.00	90.80	181.00	10826.18	-6656.16	598.04	6679.17	0.34
210	17464.00	90.70	181.10	10824.95	-6750.14	596.32	6772.90	0.15
211	17558.00	90.20	180.90	10824.21	-6844.12	594.68	6866.65	0.57
212	17651.00	90.40	180.70	10823.72	-6937.11	593.38	6959.42	0.30
213	17745.00	90.40	180.70	10823.07	-7031.10	592.23	7053.20	0.00
214	17839.00	91.40	180.10	10821.59	-7125.09	591.57	7147.00	1.24
215	17932.00	90.90	179.60	10819.72	-7218.07	591.82	7239.85	0.76

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC	
Well :	Yukon 5301 41-12 T	
County:	McKenzie	State: ND
QQ:	SW SW	Section: 12
Township:	153	N/S: N
Range:	101	E/W: W
Footages:	255	FN/SL: S
	710	FE/WL: W

Kick-off:	6/26/2013
Finish:	7/11/2013
Directional Supervision:	
Ryan Energy Services	
Date:	7/17/2013
Time:	12:14
<b>F9 to re-calculate</b>	
Proposed dir:	176.8

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE				SECT	DLS/ 100
			AZM	TVD	N-S	E-W		
216	18026.00	91.30	180.90	10817.92	-7312.05	591.41	7333.66	1.45
217	18120.00	91.30	181.00	10815.79	-7406.01	589.85	7427.39	0.11
218	18213.00	91.30	180.60	10813.68	-7498.98	588.55	7520.14	0.43
219	18307.00	91.50	181.00	10811.38	-7592.94	587.24	7613.88	0.48
220	18400.00	91.60	179.80	10808.86	-7685.90	586.59	7706.66	1.29
221	18494.00	92.00	178.90	10805.91	-7779.85	587.65	7800.52	1.05
222	18587.00	91.30	178.90	10803.23	-7872.79	589.44	7893.42	0.75
223	18681.00	91.50	181.10	10800.94	-7966.76	589.44	7987.24	2.35
224	18775.00	91.00	179.90	10798.89	-8060.73	588.62	8081.02	1.38
225	18868.00	90.50	180.40	10797.67	-8153.72	588.38	8173.85	0.76
226	18962.00	90.70	180.50	10796.68	-8247.71	587.64	8267.66	0.24
227	19056.00	90.40	179.60	10795.78	-8341.71	587.56	8361.50	1.01
228	19149.00	91.50	179.80	10794.24	-8434.69	588.04	8454.37	1.20
229	19243.00	91.70	180.00	10791.62	-8528.66	588.21	8548.19	0.30
230	19337.00	92.00	178.60	10788.58	-8622.60	589.35	8642.05	1.52
231	19430.00	91.40	177.80	10785.82	-8715.51	592.27	8734.98	1.07
232	19524.00	91.70	178.40	10783.28	-8809.42	595.39	8828.92	0.71
233	19618.00	90.40	179.20	10781.56	-8903.38	597.36	8922.85	1.62
234	19712.00	90.20	179.60	10781.06	-8997.38	598.34	9016.75	0.48
235	19805.00	91.00	179.00	10780.09	-9090.36	599.48	9109.65	1.08
236	19899.00	92.10	179.60	10777.55	-9184.32	600.63	9203.53	1.33
237	19993.00	92.60	179.60	10773.69	-9278.24	601.28	9297.34	0.53
238	20086.00	92.80	180.50	10769.31	-9371.13	601.20	9390.08	0.99
239	20180.00	90.40	181.10	10766.69	-9465.08	599.89	9483.81	2.63
240	20274.00	90.70	181.50	10765.79	-9559.05	597.76	9577.51	0.53
241	20367.00	91.80	180.70	10763.76	-9652.01	595.97	9670.23	1.46
242	20461.00	91.20	180.50	10761.30	-9745.97	594.99	9763.99	0.67
243	20574.00	91.50	180.00	10758.63	-9858.94	594.49	9876.75	0.52

&lt;

# SUNBURST CONSULTING, INC.

&gt;

Operator:	Oasis Petroleum North America, LLC		Kick-off:	7/12/2013
Well :	Yukon 5301 41-12 T Sidetrack #1		Finish:	7/16/2013
County:	McKenzie		Directional Supervision:	
QQ:	SW SW			Ryan Directional Services
Township:	153		Date:	7/17/2013
Range:	101		Time:	12:14
Footages:	255	FN/SL:		<b>F9 to re-calculate</b>
	710	FE/WL:		Proposed dir: <span style="border: 1px solid black; padding: 2px;">176.8</span>

Minimum Curvature Method (SPE-3362)

[North and East are positive and South and West are negative, relative to surface location]

No.	MD	INC	TRUE				DLS/	
			AZM	TVD	N-S	E-W	SECT	100
Tie	20180.00	90.40	181.10	10766.69	-9465.08	599.89	9483.81	2.63
1	20269.00	90.00	181.30	10766.38	-9554.06	598.03	9572.55	0.50
2	20300.00	89.10	179.30	10766.62	-9585.06	597.86	9603.49	7.07
3	20331.00	89.10	179.60	10767.11	-9616.05	598.16	9634.45	0.97
4	20362.00	88.50	179.60	10767.76	-9647.04	598.38	9665.40	1.94
5	20394.00	88.20	180.00	10768.68	-9679.03	598.49	9697.35	1.56
6	20425.00	89.60	179.60	10769.27	-9710.02	598.60	9728.30	4.70
7	20456.00	89.60	180.30	10769.49	-9741.02	598.62	9759.25	2.26
8	20487.00	89.50	179.40	10769.73	-9772.02	598.70	9790.21	2.92
9	20581.00	89.20	179.00	10770.80	-9866.01	600.02	9884.12	0.53
10	20675.00	89.50	179.30	10771.87	-9959.99	601.41	9978.03	0.45
11	20723.00	89.70	179.90	10772.20	-10007.99	601.75	10025.97	1.32
12	20786.00	89.50	180.20	10772.64	-10070.99	601.69	10088.87	0.57
13	20879.00	90.10	179.60	10772.97	-10163.98	601.85	10181.73	0.91
14	20973.00	89.80	178.50	10773.05	-10257.97	603.41	10275.66	1.21
15	21067.00	89.10	176.40	10773.95	-10351.87	607.59	10369.64	2.35
16	21167.00	89.50	175.70	10775.17	-10451.62	614.48	10469.62	0.81
17	21220.00	89.50	175.70	10775.63	-10504.47	618.46	10522.61	0.00

## DEVIATION SURVEYS

Depth	Inclination	Azimuth
100	0.56	103.48
200	0.39	98.05
300	0.27	113.40
400	0.23	170.63
500	0.22	103.52
600	0.36	124.11
700	0.20	225.13
800	0.15	310.16
900	0.11	131.92
1000	0.33	62.42
1100	0.29	257.16
1200	0.25	299.61
1300	0.15	315.40
1400	0.14	352.34
1500	0.43	350.75
1600	0.19	37.01
1700	0.38	43.81
1800	0.16	33.82
1900	0.13	219.92
2000	0.13	103.99

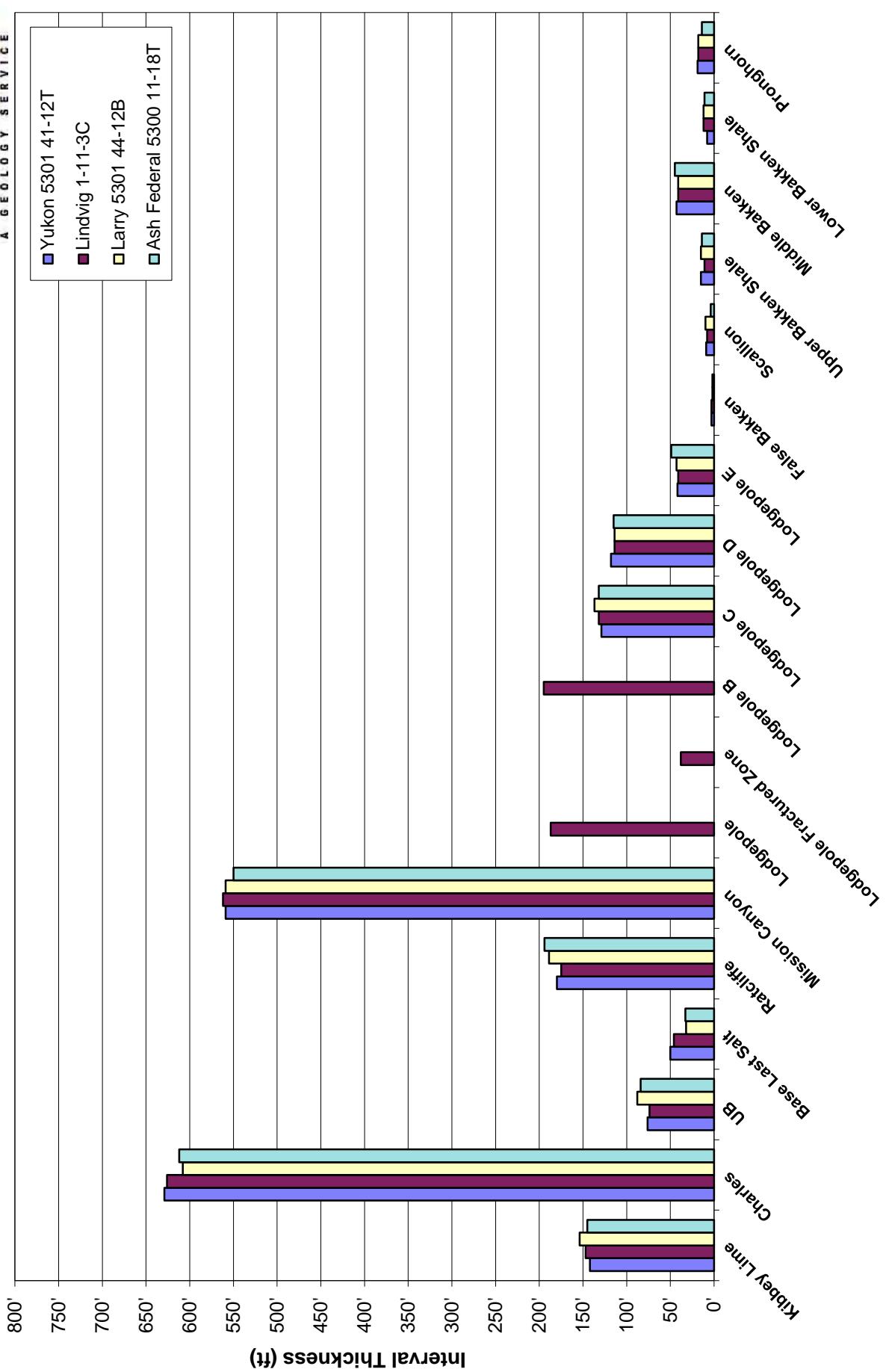
## **FORMATION TOPS & STRUCTURAL RELATIONSHIPS**

# CONTROL DATA

Operator:	Gulf Oil <b>Lindvig 1-11-3C</b>			Oasis Petroleum North America LLC. Larry 5301 44-12B	Oasis Petroleum North America LLC.
Well Name:	SE SE Sec. 11, T153N, R101W			SE NE Section 12, T153N, R101W	Ash Federal 5300 11-18T
Location:	McKenzie County, ND			McKenzie County, ND	Lot 1 Section 18, T153N, R100W
Elevation:	1/2 Mile W of Yukon 5301 41-12T KB: 2,108'			3/4 of a Mile E of Yukon 5301 41-12T KB: 2,083'	McKenzie County, ND
Formation/ Zone	E-Log Top	Datum (MSL)	Interval Thickness	E-Log Top	Datum (MSL)
Kibbey Lime	8,362'	-6,254'	147'	2,439'	8,348'
Charles	8,509'	-6,401'	626'	2,292'	8,502'
UB	9,135'	-7,027'	74'	1,666'	9,110'
Base Last Salt	9,209'	-7,101'	46'	1,592'	9,198'
Ratcliffe	9,255'	-7,147'	175'	1,546'	9,230'
Mission Canyon	9,430'	-7,322'	562'	1,371'	9,419'
Lodgepole	9,992'	-7,884'	187'	809'	9,978'
Lodgepole Fractured Zone					
Lodgepole B	10,217'	-8,109'	195'	584'	-
Lodgepole C	10,412'	-8,304'	132'	389'	10,397'
Lodgepole D	10,544'	-8,436'	114'	257'	10,534'
Lodgepole E	10,658'	-8,550'	41'	143'	10,648'
False Bakken	10,699'	-8,591'	3'	102'	10,691'
Scallion	10,702'	-8,594'	8'	99'	10,693'
Upper Bakken Shale	10,710'	-8,602'	11'	91'	10,703'
Middle Bakken	10,721'	-8,613'	41'	80'	10,718'
Lower Bakken Shale	10,762'	-8,654'	12'	39'	10,759'
Pronghorn	10,774'	-8,666'	18'	27'	10,771'
<b>Three Forks</b>					
Three Forks Target Top	10,799'	-8,691'	2'	10,796'	-8,713'
<b>Three Forks Target Landing</b>	10,801'	-8,693'	11'	10,798'	-8,715'
Three Forks Target Base	10,812'	-8,704'	7'	10,809'	-8,726'
Claystone	10,819'	-8,711'	-	10,816'	-8,733'

# INTERVAL THICKNESS

Oasis Petroleum North America, LLC - Yukon 5301 41-12T



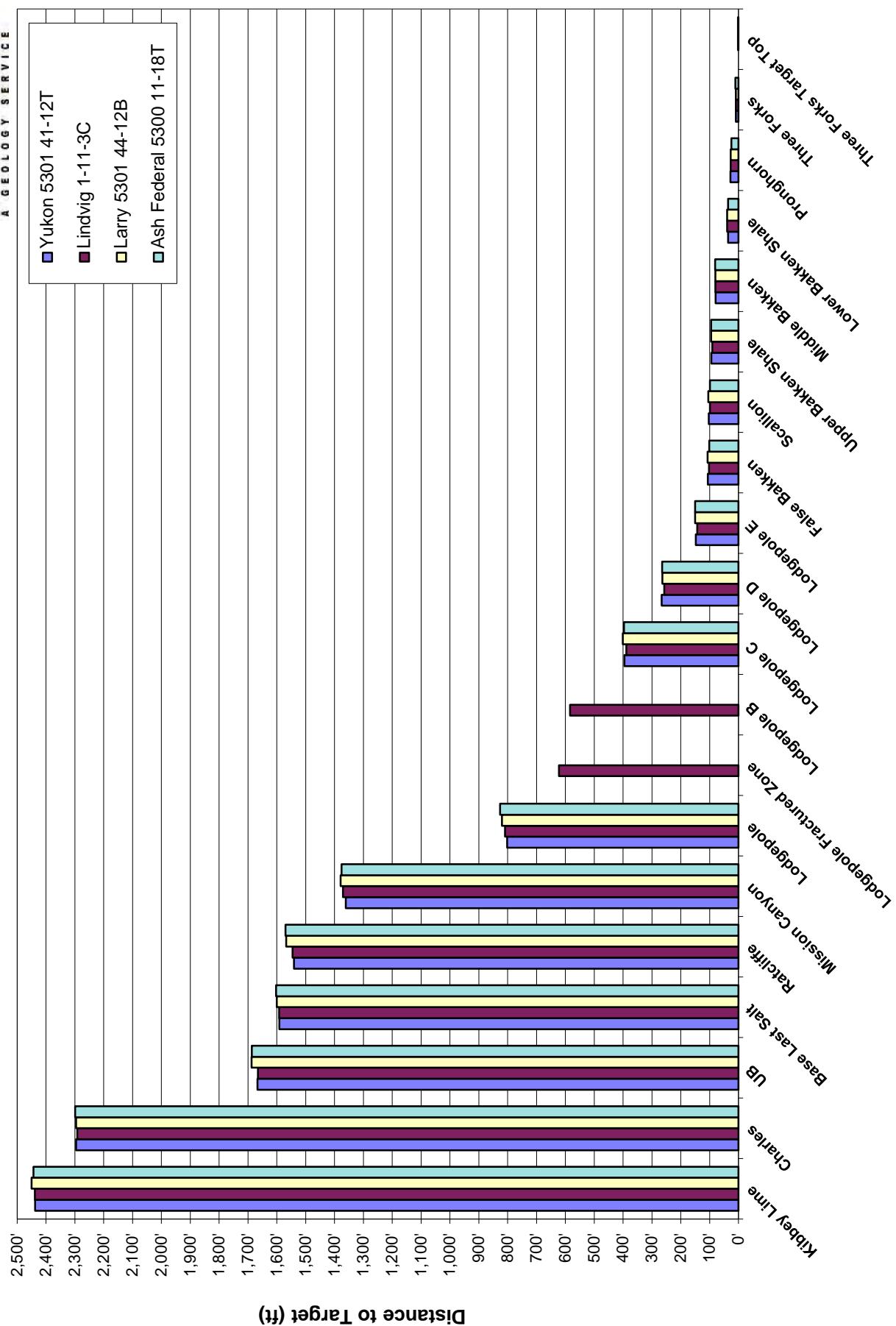
# LANDING PROJECTION

Formation/Zone:		Proposed Top of Target From:		
	Lindvig 1-11-3C	Larry 5301 44-12B	Ash Federal 5300 11-18T	Average of Offset Wells
Kibbey Lime	10,804'	10,815'	10,809'	10,809'
Charles	10,799'	10,803'	10,806'	10,803'
UB	10,802'	10,824'	10,823'	10,816'
Base Last Salt	10,804'	10,812'	10,815'	10,810'
Ratcliffe	10,808'	10,830'	10,832'	10,823'
Mission Canyon	10,813'	10,821'	10,818'	10,817'
Lodgepole	10,810'	10,821'	10,827'	10,819'
Lodgepole Fractured Zone				
Lodgepole B				
Lodgepole C	10,797'	10,809'	10,805'	10,804'
Lodgepole D	10,794'	10,801'	10,802'	10,799'
Lodgepole E	10,798'	10,805'	10,805'	10,803'
False Bakken	10,799'	10,804'	10,798'	10,800'
Scallion	10,799'	10,805'	10,799'	10,801'
Upper Bakken Shale	10,800'	10,804'	10,804'	10,803'
Middle Bakken	10,804'	10,804'	10,805'	10,804'
Lower Bakken Shale	10,806'	10,806'	10,803'	10,805'
Pronghorn	10,802'	10,802'	10,800'	10,801'
Three Forks	10,803'	10,803'	10,805'	10,804'
Three Forks Target Top	10,805'	10,805'	10,805'	10,805'
Three Forks Target Landing	10,803'	10,803'	10,803'	10,803'



## ISOPACH TO TARGET

Oasis Petroleum North America, LLC - Yukon 5301 41-12T



## LITHOLOGY

*Rig crews caught lagged samples, under the supervision of Sunburst geologists, in 30' intervals from 8,240' to 11,000', 10' intervals from 11,000' to 11,170' and then 30' intervals from 11,170' to the TD of 21,220'. Sample or gamma ray marker tops have been inserted in the sample descriptions below for reference. Samples were examined wet and dry under a binocular microscope.*

### Drilling in Kibbey Formation

8240-8270 SILTSTONE: red to orange, red brown, friable, blocky, moderately cemented; rare ANHYDRITE: off white, microcrystalline, soft, massive, amorphous

8270-8300 SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, moderately cemented; trace ANHYDRITE: off white, microcrystalline, soft, massive, amorphous

8300-8330 SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, moderately cemented; trace ANHYDRITE: off white, microcrystalline, soft, massive, amorphous

8330-8360 ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, moderately cemented

**Kibbey "Lime":** **8,366' MD 8,365' TVD (-6,246')**

8360-8390 ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, calcareous cement moderately cemented

8390-8420 LIMESTONE: mudstone to wackestone, light gray light gray brown, off white, microcrystalline, friable, dense, earthy

8420-8450 SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, moderately cemented; trace ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; trace: LIMESTONE: as above

8450-8480 SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, moderately cemented; trace ANHYDRITE: off white, microcrystalline, soft, massive, amorphous

8480-8510 SILTSTONE: red to orange, red brown, light orange to off white, trace light brown, friable, blocky, moderately cemented; trace ANHYDRITE: off white, microcrystalline, soft, massive, amorphous

8510-8540 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; ANHYDRITE: off white, microcrystalline, soft, massive, and amorphous; trace ARGILLACEOUS LIMESTONE: mudstone, light brown, gray brown, microcrystalline, firm, dense, and earthy to crystalline texture

8540-8570 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; trace ANHYDRITE: off white, microcrystalline, soft, massive, and amorphous; trace ARGILLACEOUS LIMESTONE: mudstone, light brown, gray brown, microcrystalline, firm, dense, and earthy to crystalline texture

8570-8600 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8600-8630 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8630-8660 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; trace LIMESTONE: mudstone, light brown, gray brown, microcrystalline, firm, dense, earthy to crystalline texture

8660-8690 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8690-8720 ARGILLACEOUS LIMESTONE: mudstone, light gray, gray brown occasional dark gray, microcrystalline, friable, dense, earthy; common ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; trace SALT: frosted translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8720-8750 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; ARGILLACEOUS LIMESTONE: mudstone, light gray, gray brown occasional dark gray, microcrystalline, friable, dense, earthy; occasional ANHYDRITE: off white, microcrystalline, soft, massive, and amorphous

8750-8780 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; common ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; ARGILLACEOUS LIMESTONE: mudstone, light gray, gray brown, microcrystalline, friable, dense, earthy

8780-8810 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; common ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; ARGILLACEOUS LIMESTONE: mudstone, gray, gray brown, microcrystalline, friable, dense, earthy

8810-8840 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; common ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; ARGILLACEOUS LIMESTONE: mudstone, gray, gray brown, microcrystalline, friable, dense, earthy

8840-8870 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; common ANHYDRITE: off white, microcrystalline, soft, massive, amorphous; ARGILLACEOUS LIMESTONE: mudstone, gray, gray brown, microcrystalline, friable, dense, earthy

8870-8900 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8900-8930 ARGILLACEOUS LIMESTONE: mudstone, gray, gray brown, microcrystalline, friable, dense, earthy; trace SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8930-8960 ANHYDRITE: off white, light gray, microcrystalline, soft, massive, amorphous; common ARGILLACEOUS LIMESTONE: mudstone, gray, gray brown, microcrystalline, friable, dense, and earthy; trace SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; trace

8960-8990 ARGILLACEOUS LIMESTONE: mudstone, gray, gray brown, microcrystalline, friable, dense, earthy; common ANHYDRITE: off white, light gray, microcrystalline, soft, massive, and amorphous; trace SALT: frosted translucent, crystalline, hard, anhedral to subhedral, crystalline texture

8990-9020 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; rare ARGILLACEOUS LIMESTONE: mudstone, light gray, light gray brown, microcrystalline, friable, dense, earthy; trace ANHYDRITE: off white, light gray, microcrystalline, soft, massive, amorphous

9020-9050 No sample

9050-9080 ARGILLACEOUS LIMESTONE: mudstone, light brown, light gray brown, microcrystalline, friable, dense, crystalline; rare SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; trace ANHYDRITE: off white, light gray, microcrystalline, soft, massive, amorphous

9080-9110 ARGILLACEOUS LIMESTONE: mudstone, light gray to gray, microcrystalline, firm, earthy texture, trace disseminated pyrite, no visible porosity; rare ANHYDRITE: as above

9110-9140 No sample

**Upper Berentson:** **9,138' MD 9,136' TVD (-7,017')**

9140-9170 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; rare ARGILLACEOUS LIMESTONE: mudstone, medium gray to gray, occasional light gray, microcrystalline, firm, earthy texture, trace disseminated pyrite, trace milky white calcite, no visible porosity

9170-9200 SALT: frosted, translucent, crystalline, hard, anhedral to subhedral, crystalline texture; trace LIMESTONE: mudstone, light gray, light gray brown, microcrystalline, friable, dense, and earthy

9200-9230 SALT: clear, rare frosted, trace milky, crystalline, firm, anhedral to subhedral, crystalline texture; rare ARGILLACEOUS LIMESTONE: mudstone, light to gray, light gray tan to gray brown, occasional off white, rare cream, trace tan, microcrystalline, firm, earthy texture, trace disseminated pyrite, no visible porosity

**Base Last Salt:**

**9,214' MD 9,212' TVD (-7,093')**

9230-9260 ARGILLACEOUS LIMESTONE: mudstone, light to gray, light gray tan to gray brown, occasional off white, rare cream, trace tan, microcrystalline, firm, earthy texture, trace disseminated pyrite, no visible porosity; LIMESTONE: tan to gray tan, rare light brown, trace cream, microcrystalline, firm, crystalline texture, possible intercrystalline porosity, no visible oil stain, trace ANHYDRITE: cream to off white, microcrystalline, soft, euhedral, earthy

**Ratcliffe:**

**9,264' MD 9,262' TVD (-7,143')**

9260-9290 LIMESTONE: mudstone, tan to light brown, occasional light gray tan, rare off white, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, possible intercrystalline porosity, no visible oil stain; trace ANHYDRITE: as above

9290-9320 LIMESTONE: mudstone, tan to light brown, occasional light gray tan, rare off white, microcrystalline, firm, earthy to crystalline texture, dolomitic in part, trace disseminated pyrite, possible intercrystalline porosity, trace light brown oil stain; trace ANHYDRITE: as above

9320-9350 LIMESTONE: mudstone, tan to light brown, occasional light gray tan, rare off white, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, possible intercrystalline porosity, trace light brown oil stain; trace ANHYDRITE: as above

9350-9380 LIMESTONE: mudstone, tan to light brown, occasional light gray tan, rare off white, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, possible intercrystalline porosity, no visible oil stain; trace ANHYDRITE: as above

9380-9410 LIMESTONE: mudstone, tan, light brown, occasional cream to buff, rare off white, rare light gray brown to light gray, microcrystalline, firm, earthy texture, trace disseminated pyrite, no visible porosity, no oil stain

9410-9440 LIMESTONE: mudstone, tan, light brown, occasional cream to buff, rare off white, rare light gray brown to light gray, microcrystalline, firm, earthy texture, trace disseminated pyrite, no visible porosity, no oil stain

**Mission Canyon:**

**9,444' MD 9,442' TVD (-7,323')**

9440-9470 LIMESTONE: mudstone, light gray to light gray brown, tan gray, rare medium gray, rare cream to buff, trace tan to light brown, microcrystalline, firm, earthy texture, trace disseminated pyrite, no visible porosity, no oil stain

9470-9500 LIMESTONE: mudstone, light gray to light gray brown, tan gray, rare medium gray, rare cream to buff, trace tan to light brown, microcrystalline, firm, earthy texture, trace disseminated pyrite, trace fossil fragment, no visible porosity, no oil stain

9500-9530 LIMESTONE: mudstone, light gray to light gray brown, tan gray, rare medium gray, rare cream to buff, trace tan to light brown, microcrystalline, firm, earthy texture, trace disseminated pyrite, trace fossil fragment, no visible porosity, no oil stain

9530-9560 LIMESTONE: mudstone, light gray to light gray brown, tan gray, rare medium gray, rare cream to buff, trace tan to light brown, microcrystalline, firm, earthy texture, trace disseminated pyrite, trace fossil fragment, no visible porosity, no oil stain

9560-9590 LIMESTONE: mudstone, light brown, light gray brown, light gray, rare brown, microcrystalline, firm, earthy, rare crystalline texture, trace disseminated pyrite, trace fossil fragment, trace spotty light brown oil stain, no visible porosity

9590-9620 LIMESTONE: mudstone, light brown, light gray brown, light gray, rare brown, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, rare fossil fragment, trace spotty light brown oil stain

9620-9650 LIMESTONE: mudstone, light brown to brown, gray brown, rare off white, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, rare fossil fragment, trace spotty light brown oil stain

9650-9680 LIMESTONE: mudstone, light brown to brown, gray brown, rare off white, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, rare fossil fragment, trace spotty light brown oil stain

9680-9710 LIMESTONE: mudstone, light gray, light gray brown, rare brown, rare off white, trace gray, microcrystalline, firm, earthy to crystalline texture, trace disseminated pyrite, trace fossil fragment

9710-9740 LIMESTONE: mudstone, light gray, light gray brown, rare brown, rare off white, trace gray, microcrystalline, firm to friable, earthy to crystalline texture, trace disseminated pyrite, trace fossil fragment

9740-9770 LIMESTONE: mudstone, off white to cream, light brown, light gray brown, trace light gray, microcrystalline, friable, earthy to crystalline texture, trace disseminated pyrite, trace algal material

9770-9800 LIMESTONE: mudstone, off white to cream, light brown, light gray brown, trace light gray, microcrystalline, friable, earthy to crystalline texture, trace disseminated pyrite, trace algal material

9800-9830 LIMESTONE: mudstone, off white to cream, rare light brown, trace light gray, microcrystalline, friable, earthy texture, trace disseminated pyrite, trace algal material, trace light brown spotty oil stain

9830-9860 LIMESTONE: mudstone, off white to cream, rare light brown, trace light gray, microcrystalline, friable, earthy texture, trace disseminated pyrite, trace algal material, trace light brown spotty oil stain

9860-9890 LIMESTONE: mudstone, off white to cream, light brown, trace light gray, microcrystalline, friable, earthy texture, trace disseminated pyrite, trace light brown spotty oil stain, trace dark brown dead spotty oil stain

9890-9920 LIMESTONE: mudstone, light brown to brown, gray brown, rare off white, microcrystalline, friable to firm, earthy to crystalline texture, trace disseminated pyrite, trace light brown spotty oil stain, trace dark brown dead spotty oil stain

9920-9950 LIMESTONE: mudstone, light gray brown, tan, light gray, rare off white, microcrystalline, friable to firm, earthy to crystalline texture, trace disseminated pyrite, trace light brown spotty oil stain, trace dark brown dead spotty oil stain

9950-9980 LIMESTONE: mudstone, light gray brown, tan, light gray, rare off white, microcrystalline, friable to firm, earthy to crystalline texture, trace disseminated pyrite, trace black brown algal material, no visible porosity, no visible oil stain

9980-10010 LIMESTONE: mudstone, light gray brown, tan, light gray, rare off white, microcrystalline, friable to firm, earthy to crystalline texture, trace disseminated pyrite, trace black brown algal material, no visible porosity, no visible oil stain; rare ARGILLACEOUS LIMESTONE: light gray, rare light gray brown, rare medium gray, firm, earthy, rare disseminated pyrite, trace white milky calcite, no visible porosity, no visible oil stain

**Lodgepole:** **10,016' MD 10,015' TVD (-7,958')**

10010-10040 ARGILLACEOUS LIMESTONE: light gray, rare light gray brown, rare medium gray, firm, earthy, rare disseminated pyrite, trace white milky calcite, no visible porosity, no visible oil stain

10040-10070 ARGILLACEOUS LIMESTONE: light to medium gray, gray, rare light gray brown, trace dark gray, firm, earthy, rare disseminated pyrite, trace white milky calcite, no visible porosity, no visible oil stain

10070-10100 ARGILLACEOUS LIMESTONE: light to medium gray, gray, rare light gray brown, trace dark gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10100-10130 ARGILLACEOUS LIMESTONE: medium to light gray, gray, rare light gray brown, trace dark gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10130-10160 ARGILLACEOUS LIMESTONE: medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10160-10190 ARGILLACEOUS LIMESTONE: medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10190-10220 ARGILLACEOUS LIMESTONE: medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10220-10250 ARGILLACEOUS LIMESTONE: medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10250-10283 ARGILLACEOUS LIMESTONE: medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10283-10300 No Sample; bottoms upper was not circulated

10300-10310 ARGILLACEOUS LIMESTONE: mudstone, medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10310-10340 ARGILLACEOUS LIMESTONE: mudstone, medium gray, occasional light gray, occasional dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10340-10370 ARGILLACEOUS LIMESTONE: mudstone, medium to light gray, occasional medium gray tan, rare dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10370-10400 ARGILLACEOUS LIMESTONE: mudstone, medium to light gray, occasional medium gray tan, rare dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10400-10430 ARGILLACEOUS LIMESTONE: mudstone, medium to light gray, rare dark gray, trace light gray brown, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10430-10460 ARGILLACEOUS LIMESTONE: mudstone, medium gray brown, occasional medium to light gray, rare dark gray, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10460-10490 ARGILLACEOUS LIMESTONE: mudstone, light gray brown, light to medium gray, rare dark gray, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10490-10520 ARGILLACEOUS LIMESTONE: mudstone, light to medium gray brown, medium to light gray, rare dark gray, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10520-10550 ARGILLACEOUS LIMESTONE: mudstone, light to medium gray brown, medium to light gray, rare dark gray, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10550-10580 ARGILLACEOUS LIMESTONE: mudstone, light to medium gray brown, medium to light gray, rare dark gray, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10580-10610 ARGILLACEOUS LIMESTONE: mudstone, light to medium gray brown, medium to light gray, rare dark gray, trace black gray, firm, earthy, rare disseminated pyrite, no visible porosity, no visible oil stain

10610-10640 ARGILLACEOUS LIMESTONE: mudstone, light gray brown, common medium gray brown, occasional light gray, rare dark gray, trace black gray, trace light brown, firm, earthy, common disseminated pyrite, no visible porosity, no visible oil stain

10640-10670 ARGILLACEOUS LIMESTONE: mudstone, light gray brown, common medium gray brown, occasional light gray, rare dark gray, trace black gray, trace light brown, firm, earthy, common disseminated pyrite, no visible porosity, no visible oil stain

10670-10700 ARGILLACEOUS LIMESTONE: mudstone, medium gray, gray brown, light gray, rare dark brown, firm, earthy, common disseminated pyrite, no visible porosity, no visible oil stain

10700-10730 ARGILLACEOUS LIMESTONE: mudstone, light gray brown, common medium gray brown, occasional light gray, rare dark gray, trace black gray, trace light brown, firm, earthy, common disseminated pyrite, no visible porosity, no visible oil stain

**False Bakken:** **10,749' MD 10,697' TVD (-8,578')**

10730-10760 LIMESTONE: mudstone, light gray, light gray brown, gray, trace off white, firm, earthy, common disseminated pyrite, no visible porosity, no visible oil stain

**Scallion:** **10,752' MD 10,700' TVD (-8,581')**

10730-10760 LIMESTONE: mudstone, light gray, light gray brown, gray, trace off white, firm, earthy, common disseminated pyrite, no visible porosity, no visible oil stain

**Upper Bakken Shale:** **10,765' MD 10,709' TVD (-8,590')**

10760-10790 SHALE: black, hard, subblocky, earthy, pyritic, petroliferous, carbonaceous, fracture porosity

**Middle Bakken:** **10,793' MD 10,724' TVD (-8,605')**

10790-10820 SILTSTONE: light gray, friable, sub platy to sub blocky, earthy texture, calcareous cement, moderately cemented, trace disseminated pyrite, possible intergranular porosity, occasional dark brown spotty oil stain; trace SILTY SANDSTONE: light gray, very fine grained, friable, subangular to sub rounded, well sorted, calcareous cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, occasional dark brown spotty oil stain

10820-10850 SILTY SANDSTONE: light gray, very fine grained, friable, subangular to sub rounded, well sorted, calcareous cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, occasional dark brown spotty oil stain

10850-10880 SILTY SANDSTONE: light gray, very fine grained, friable, subangular to sub rounded, well sorted, calcareous cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, occasional dark brown spotty oil stain

**Lower Bakken Shale:** **10,885' MD 10,767' TVD (-8,648')**

10880-10910 SHALE: black, hard, subblocky, earthy, pyritic, petroliferous, carbonaceous, fracture porosity

**Pronghorn:** **10,917' MD 10,775' TVD (-8,656')**

10910-10940 SILTSTONE: medium to dark gray, gray brown, friable, sub platy to sub blocky, earthy texture, dolomite cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, trace light brown spotty oil stain

10940-10970 SILTSTONE: medium to dark gray, gray brown, friable, sub platy to sub blocky, earthy texture, dolomite cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, trace light brown spotty oil stain

10970-11000 SILTSTONE: medium to dark gray, gray brown, friable, sub platy to sub blocky, earthy texture, dolomite cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, trace light brown spotty oil stain



11160-11173 DOLOMITE: mudstone, tan, pink, friable, earthy texture, trace disseminated pyrite, trace spotty light brown oil stain; common SHALE: light green, trace gray, friable, earthy texture, trace disseminated pyrite, no visible porosity

11173-11180 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, occasional spotty light to medium brown oil stain; common SHALE: light blue green to minty pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, possible intergranular porosity

11180-11210 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain

11210-11240 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain

11240-11270 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain

11270-11300 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain

11300-11330 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, slow diffuse blue white cut fluorescence, pale yellow green residual ring cut fluorescence

11330-11360 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, moderate diffuse blue white cut fluorescence, slow diffuse blue white cut fluorescence, pale yellow green residual ring cut fluorescence.

11360-11390 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, slow diffuse blue white cut fluorescence, pale yellow green residual ring cut fluorescence

11390-11420 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain

11420-11450 DOLOMITE: mudstone, tan to light brown, occasional cream, trace medium brown, trace light gray tan, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light blue green to mint, pale green, trace gray, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain





























































20480-20510 DOLOMITE: mudstone, cream, off white, tan to light brown, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light gray, rare light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

**Pronghorn:**

**20,530' MD 10,760' TVD (-8,641')**

20510-20540 DOLOMITE: mudstone, cream, off white, tan to light brown, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: as above trace SILTSTONE: medium to dark gray, gray brown, friable, sub platy to sub blocky, earthy texture, dolomite cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, trace light brown spotty oil stain

20540-20574 DOLOMITE: mudstone, cream, off white, tan to light brown, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: as above trace SILTSTONE: medium to dark gray, gray brown, friable, sub platy to sub blocky, earthy texture, dolomite cement, moderately cemented, trace disseminated and nodular pyrite, possible intergranular porosity, trace light brown spotty oil stain

**Side-track #1:**

**20,275' MD 10,766' TVD (-8,647')**

20275-27316 DOLOMITE: mudstone, tan to light brown, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light gray, rare light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

**Side-track #2:**

**20,265' MD 10,766' TVD (-8,647')**

20265-20300 DOLOMITE: mudstone, tan to light brown, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light gray, rare light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

20300-20330 DOLOMITE: mudstone, tan to light brown, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light gray, rare light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

20330-20360 DOLOMITE: mudstone, tan to light brown, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; common SHALE: light gray, rare light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

20360-20390 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

20390-20420 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence





21050-21080 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

21080-21110 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

21110-21140 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

21140-21170 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence

21170-21220 DOLOMITE: mudstone, light brown to tan, common cream, rare off white, trace light gray, very fine crystalline, friable, dense, earthy texture, rare disseminated pyrite, trace nodular pyrite, possible intercrystalline porosity, occasional spotty light to medium brown oil stain; rare SHALE: light gray, trace light gray green, trace pale green to mint green, firm, subblocky, earthy texture, trace disseminated pyrite, no visible oil stain, continuous cut fluorescence



# SUNDRY NOTICES AND REPORTS ON WELLS - FORM 14

INDUSTRIAL COMMISSION OF NORTH DAKOTA

OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5740 (09-2008)



Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>July 8, 2013</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date	<input checked="" type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input type="checkbox"/> Other	

Well Name and Number  
**Yukon 5301 41-12T**

Footages	Qtr-Qtr	Section	Township	Range
<b>255 F S L</b>	<b>650 F W L</b>	<b>SWSW</b>	<b>12</b>	<b>153 N 101 W</b>
Field	Pool <b>Bakken</b>		County <b>McKenzie</b>	

## 24-HOUR PRODUCTION RATE

Before	After
Oil Bbls	Oil Bbls
Water Bbls	Water Bbls
Gas MCF	Gas MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

## DETAILS OF WORK

We respectfully request permission to revise the APD issued for this well to include the following change:

Cement entire 4.5" liner from TD to line top.

Attached is the new drill plan, wellbore schematic, and well summary.

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9563</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Heather McCowan</b>	
Title <b>Regulatory Assistant</b>	Date <b>July 8, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

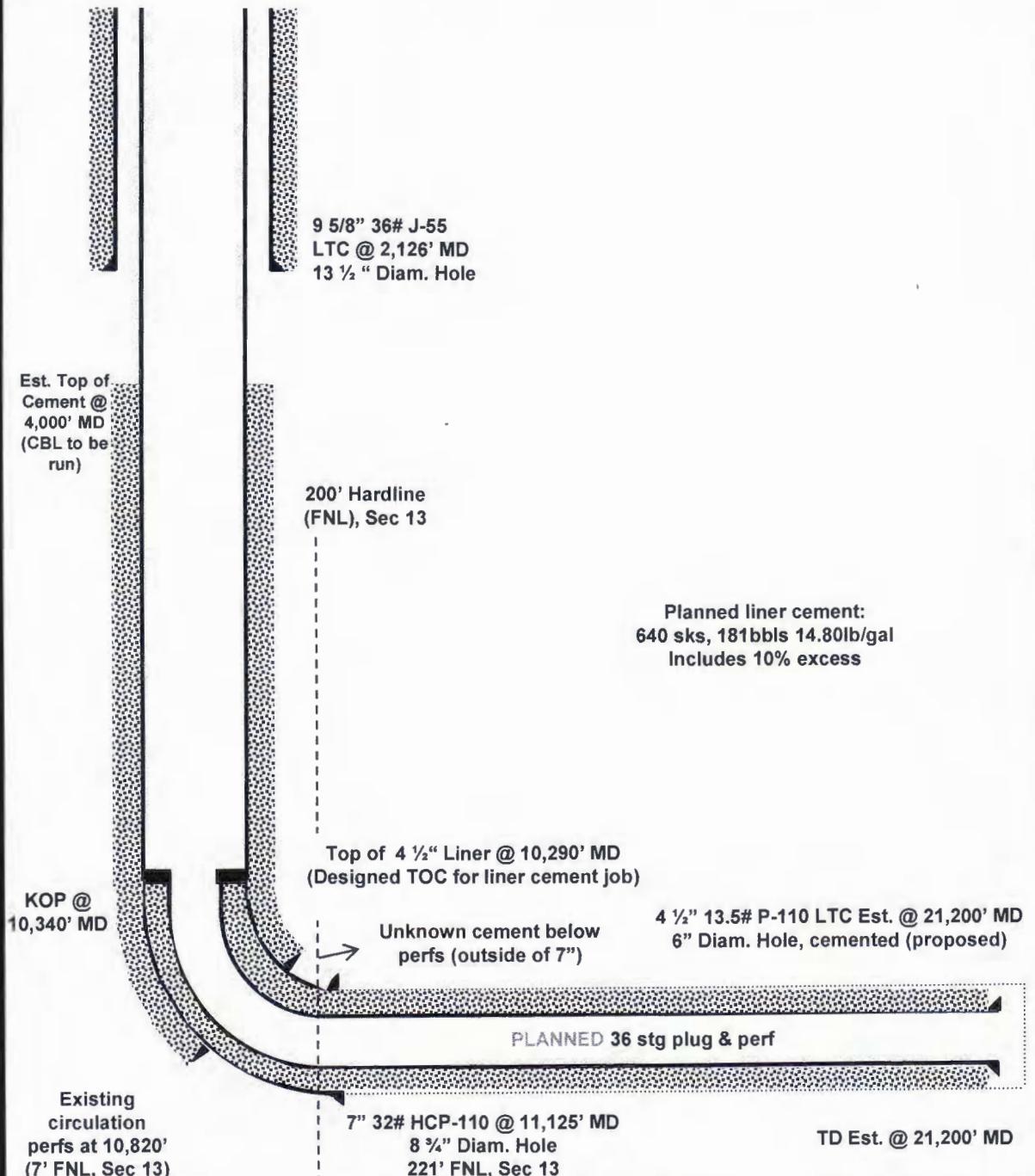
## FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>7-11-13</b>	
By 	
Title <b>Petroleum Resource Specialist</b>	

RIG: Nabors B22  
NDIC#: 22099

**Yukon 5301 41-12T  
WELLBORE SCHEMATIC**

API #: 33-053-03911  
FORMATION: Three Forks  
FIELD: Baker



**OASIS PETROLEUM NA LLC**

**Yukon 5301 41-12T**  
T153N-R101W Sec. 12 (SHL) – Drilling Sec. 13 & 24  
255' FSL & 710' FWL Sec. 12

Status: Drilling  
McKenzie County, North Dakota  
Updated: 7/8/2013 MGB

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

**SURFACE CASING AND CEMENT DESIGN**

Size	Interval		Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
	From	To						Minimum	Optimum	Max
9-5/8"	0	2119	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse	Burst	Tension	Cost per ft
		(psi) / a	(psi) / b	(1000 lbs) / c	
0' - 2119'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.04	3520 / 3.55	453 / 2.73	

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.0 ppg fluid on backside (2119' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2119' setting depth).
- c) Based on string weight in 9.0 ppg fluid at 2119' TVD plus 100k# overpull.  
(Buoyed weight equals 66k lbs.)

Cement volumes are based on 9-5/8" casing set in 13-1/2" hole with 60% excess to circulate cement back to surface.  
Mix and pump the following slurry.

**Pre-flush (Spacer):      20 bbls fresh water**

**Lead Slurry:**      **437 sks** (225 bbls), 11.5 lb/gal, 2.90 cu. ft./sk Conventional Class G Cement with 4.0% BWOB Extender, 2.0% BWOB Expanding Agent, 2.0% CaCl<sub>2</sub>, and 0.250 lb/sk Lost Circulation Additive

**Tail Slurry:**      **337 sks** (70 bbls), 15.8 lb/gal, 1.16 cu. ft./sk Conventional Class G Cement with 0.25% BWOB CaCl<sub>2</sub>, and 0.250 lb/sk Lost Circulation Agent

**Oasis Petroleum**  
**Well Summary**  
**Yukon 5301 41-12T**  
**Section 12 T153N R101W**  
**McKenzie County, ND**

INTERMEDIATE CASING AND CEMENT DESIGN

Size	Interval	Weight	Grade	Coupling	I.D.	Drift**	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
7"	0' -11150'	32	HCP-110	LTC	6.094"	6.000"**	6,730	8,970	9,870

\*\*Special Drift 7" 32# to 6.0".

Interval	Length	Description	Collapse (psi) a	Burst (psi) b	Tension (1000 lbs) c	Condition
0' -11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 2.10*	12,460 / 1.19	797/2.03	New
0' -11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 1.07**	12,460 / 1.19		New

API Rating & Safety Factor

- a. \*Assume full casing evacuation with 10 ppg fluid on backside. \*\*Assume full casing evacuation with 1.2 psi/ft equivalent fluid gradient across salt intervals (from 6385' to 10335').
- b. Burst pressure based on 9,000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9.0 ppg fluid on backside—to 10812' TVD.
- c. Based on string weight in 10 ppg fluid, (302k lbs buoyed weight) plus 100k lbs overpull.

Cement volumes are estimates based on 7" casing set in an 8-3/4" hole with 30% excess.

**Pre-flush (Spacer):**      **50 bbls** Saltwater  
**20 bbls** CW8  
**20 bbls** Freshwater

**Lead Slurry:**      **184 sks** (85 bbls), 11.8 ppg, 2.59 cu. ft./sk 65:35 POZ Cement with 6% BWOB Extender, 0.15% BWOB Viscosifier, 0.8% BWOB Fluid Loss Additive, 0.2% BWOB Anti Foam, and 0.25 lb/sk Lost Circulation Additive

**Tail Slurry:**      **568 sks** (166 bbls), 15.6 ppg, 1.64 cu. ft./sk Conventional Class G Cement with 10.0% BWOB NaCL, 35.0% BWOB Silica Flour, 0.2% BWOB Fluid Loss, 0.27% BWOB Retarder, 0.2% BWOB Anti Foam, and 0.25 lb/sk Lost Circulation Additive

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

**PRODUCTION LINER**

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10285'-21275'	13.5	P-110	BTC	3.92"	3.795"	2,270	3,020	3,780

Interval	Length	Description	Collapse	Burst	Tension	Condition
			(psi) a	(psi) b	(1000 lbs) c	
10285'-21275'	10991'	4-1/2", 13.5 lb, P-110, BTC	10670 / 2.00	12410 / 1.19	422 / 2.03	New

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10812' TVD.
- b) Burst pressure based on 9,000 psi treating pressure with 10.2 ppg internal fluid gradient and 9.0 ppg external fluid gradient @ 10812' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 108k lbs.) plus 100k lbs overpull.

**Cemented Liner** – Based on 4.5" liner from TD to liner top, 10% excess.

**Pre-flush (Spacer):**      **30 bbls MudPushII, 12lb/gal**

**Lead Slurry:**      **640 sks (181 bbls) 14.80 lb/gal Conventional CEMENT with 61.1 lb/sk D907 Cement, 23.45lb/sk D035-BCA Cementing Additive, 0.2% D065 Dispersant, 0.2% D046 Anti Foam, 0.4% D167 Fluid Loss, 35% D066 Silica, 0.4% D198 Retarder**

DRILLING PLAN							
OPERATOR	Oasis Petroleum		COUNTY/STATE	McKeesport, PA, USA			
WELL NAME	NDIC MAP 36# 12T		RIG	National B-12			
WELL TYPE	Horizontal Drill		Surface Location (Survey Plat)	SEC. 46	210' Elevation		
LOCATION	Sec. 46, Twp 12N, Rng 12W		GROUND ELEV:	2104	Finished Pad Elev.		
EST. T.D.	21,275'		KB ELEV:	2119	Sub Height:	15	
TOTAL LATERAL:	10,125' (est)						
PROGNOSIS:	Based on 2 1/2' (0.63m)		LOGS:				
MARKER	DEPTH (Surf Loc)	DATUM (Surf Loc)	Type	Interval			
Pierre	NDIC MAP	2,019	100'	OH Logs: Triple Combo KOP to Kirby (or min run of 1800' whichever is greater); GR/Res to BSC; GR to surf; CND through the Dakota			
Greenhorn		4,629	-2,510'	CBL/GR: Above top of cement/GR to base of casing			
Mowry		5,020	-2,901'	MWD GR: KOP to lateral TD			
Dakota		5,447	-3,328'	REQUEST LOG WAIVER due to drilling 1-1/2" Holes more than 10,125' SLL			
Rierdon		6,385	-4,246'	Surf:	3 deg. max., 1 deg / 100'; surv every 500'		
Dunham Salt		6,885	-4,766'	Prod:	5 deg. max., 1 deg / 100'; surv every 100'		
Dunham Salt Base		6,961	-4,842'				
Spearfish		6,966	-4,847'				
Pine Salt		7,271	-5,152'				
Pine Salt Base		7,326	-5,207'				
Opeche Salt		7,355	-5,236'				
Opeche Salt Base		7,395	-5,276'				
Broom Creek (Top of Minnelusa Gp.)		7,599	-5,490'				
Amsden		7,657	-5,538'				
Tyler		7,845	-5,726'				
Otter (Base of Minnelusa Gp.)		8,016	-5,899'				
Kibbey		8,369	-6,250'				
Charles Salt		8,515	-6,395'				
UB		9,141	-7,022'				
Base Last Salt		9,217	-7,098'				
Ratcliffe		9,262	-7,143'				
Mission Canyon		9,437	-7,316'				
Lodgepole		10,000	-7,881'				
Lodgepole Fracture Zone		10,177	-8,058'				
False Bakken		10,699	-8,580'				
Upper Bakken		10,707	-8,586'				
Middle Bakken		10,717	-8,598'				
Lower Bakken		10,780	-8,641'				
Pronghorn		10,772	-8,653'				
Three Forks		10,789	-8,670'				
Three Forks Target Top		10,797	-8,678'				
Three Forks Target Base		10,813	-8,694'				
Claystone		10,817	-8,698'				
Dip Rate:	overall +0.06° or -10' incl 0° up (complex)						
Max. Anticipated BHP:	45.0						
MUD:	Interval	Type	WT	Vis	WL	Remarks	
Surface:	0' -	2,119' FW/Gel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,119' -	11,150' Invert	9.5-10.4	40-50	30+HtHp	Circ Mud Tanks	
Lateral:	11,150' -	21,275' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks	
CASING:	Size	Wt pcf	Hole	Depth	Cement	WOC	Remarks
Surface:	9-5/8"	36#	13-1/2"	2,119'	To Surface	12	100' into Pierre
Intermediate:	7"	32#	8-3/4"	11,150'	3,947'	24	1500' above Dakota
Production Liner:	4 5/8"	13 1/2"	6"	21,275'	TOL @ 10,290'	24	50' above KOP
PROBABLE PLUGS, IF REQ'D:							
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI	
Surface:	2,119	2,119	255' FSL	710' FWL	Sec. 12 T153N-R101W		Survey Company:
KOP:	10,335'	10,335'	255' FSL	710' FWL	Sec. 12 T153N-R101W		Build Rate: 12 deg /100'
EOC:	11,685'	10,812'	150' FNL	948' FWL	Sec. 12 T153N-R101W	150.0	
Casing Point:	11,150'	10,812'	215' FNL	931' FWL	Sec. 13 T153N-R101W	150.0	
Middle Bakken Lateral TD:	21,275'	10,796'	250' FSL	1300' FWL	Sec. 24 T153N-R101W	179.9	
Comments:							
DRILL TO KOP							
DRILL CURVE TO 90 DEG AND 7" CASING POINT							
SET 7" CASING. DRILL THREE FORKS LATERAL.							
MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral.							
MWD GR to be run from KOP to Lateral TD.							
36 Stage Cemented Liner P&P							
<b>OASIS</b> PETROLEUM							
Geology:	1/10/2013						
Engineering: M. Brown 7-8-2013							



## SUNDRY NOTICES AND REPORTS ON WELLS

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5748 (09-2006)



Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>June 18, 2013</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date	<input checked="" type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input type="checkbox"/> Other	

Well Name and Number <b>Yukon 5301 41-12T</b>					
Footages	Qtr-Qtr	Section	Township	Range	
255 F S L	710 F W L	SWSW	12	153 N	101 W
Field	Pool		County		
Baker	Bakken		McKenzie		

24-HOUR PRODUCTION RATE			
Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)			
Address	City	State	Zip Code

### DETAILS OF WORK

Oasis Petroleum is respectfully seeking permission to make the follow amendment to our well design on the Yukon 5301 41-12T:

Run two open hole swell packers directly outside of the 7" casing shoe, and a single open hole swell packer directly inside of the 7" casing, below the perforations. Perforations in our 4.5" liner for the purpose of fracture stimulation and production will be below the prior mentioned swell packers. — *Denied part outside SH.*

The reason for the change request is that circulation was lost after getting 7" casing to TD, in the Three Forks formation. Permission was granted by John Axtman to perforate 7" casing in the Middle Bakken with 8 x 1/2" holes at a depth of 10,820' MD (10,739' TVD). The 7" casing shoe is at 11,125' MD (476' south of the SHL). The 200' hardline is 455' south of SHL. The perforations shot at 10,820' MD are 207' south of SHL (7' FNL). The 7" casing shoe is across the hardline, but the perforations are not.

As a result of the likely case that there is not sufficient cement isolation across the hardline, Oasis Petroleum is respectfully requesting permission to use the swellable packer configuration described above in order to achieve isolation prior to fracture stimulation. — *Denied must isolate w/cnt.*

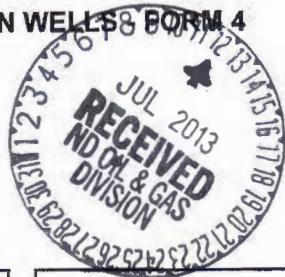
Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>(281) 404-9634</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Mike Brown</b>	
Title <b>Drilling Engineer II</b>	Date <b>July 5, 2013</b>	
Email Address <b>mbrown@oasispetroleum.com</b>		

FOR STATE USE ONLY	
<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date <b>7/12/13</b>	
By 	
Title <b>Mineral Resources Permit Manager</b>	



# SUNDY NOTICES AND REPORTS ON WELLS FORM 4

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFSN 5749 (09-2006)



Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>July 8, 2013</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date	<input checked="" type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input type="checkbox"/> Other	

Well Name and Number <b>Yukon 5301 41-12T</b>					
Footages	Qtr-Qtr	Section	Township	Range	
255 F S L	650 F W L	SWSW	12	153 N	101 W
Field <i>Bakken</i>	Pool <b>Bakken</b>	County	<b>McKenzie</b>		

Name of Contractor(s)					
Address			City	State	Zip Code

## 24-HOUR PRODUCTION RATE

	Before		After
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

## DETAILS OF WORK

We respectfully request permission to revise the APD issued for this well to include the following change:

Cement entire 4.5" liner from TD to line top.

Attached is the new drill plan, wellbore schematic, and well summary.

\*Heel perf must be no less than 676 S. Also  
Isolation & confirmation of NDIC compliance will  
be determined via CBL.

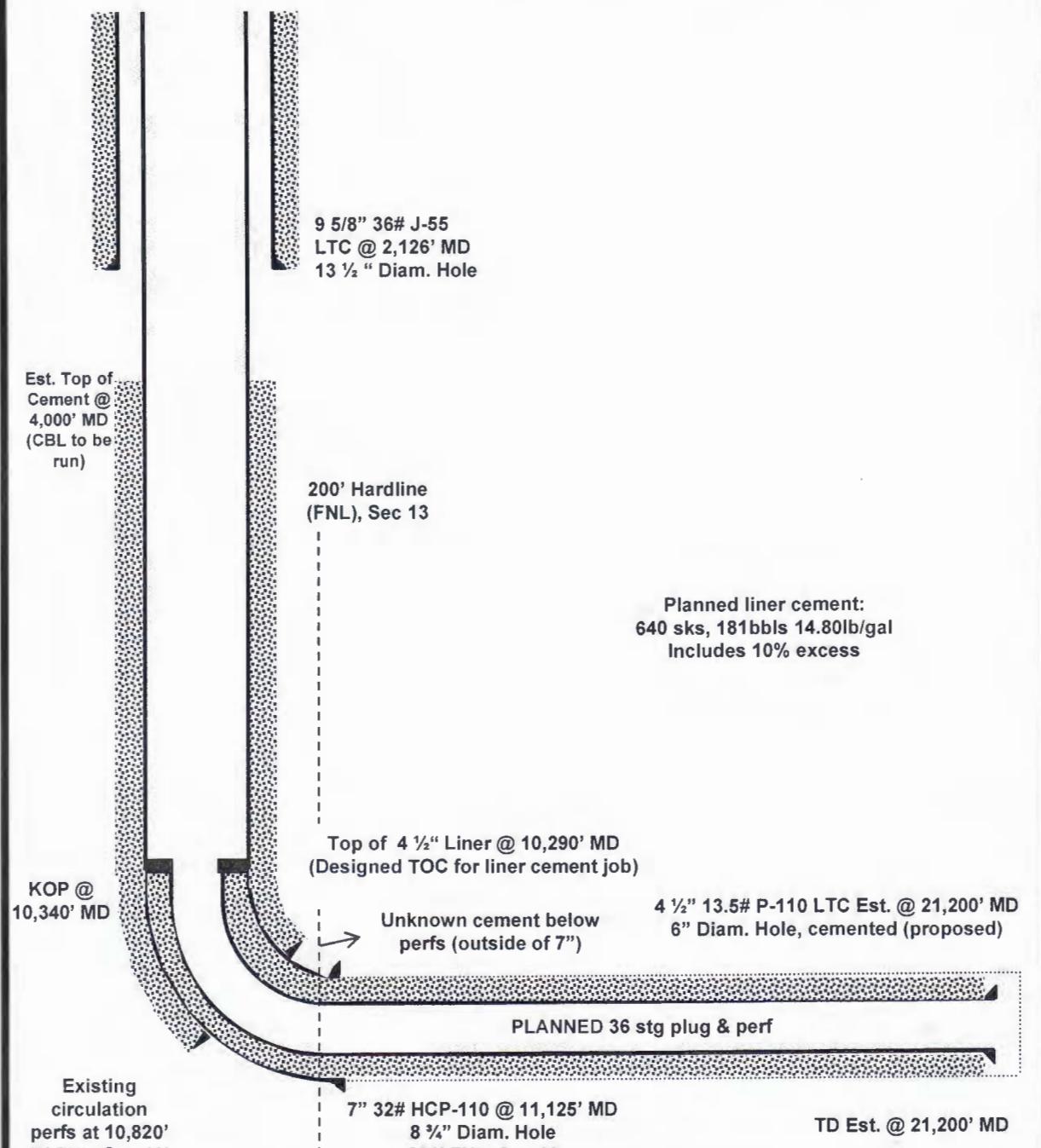
Company <b>Oasis Petroleum North America LLC</b>			Telephone Number <b>281-404-9563</b>
Address <b>1001 Fannin, Suite 1500</b>			
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>	
Signature <i>Heather McCowan</i>	Printed Name <b>Heather McCowan</b>		
Title <b>Regulatory Assistant</b>	Date <b>July 8, 2013</b>		
Email Address <b>hmccowan@oasispetroleum.com</b>			

FOR STATE USE ONLY	
<input checked="" type="checkbox"/> Received *	<input type="checkbox"/> Approved
Date <b>7/12/13</b>	
By <i>Tom Lohf</i>	
Title <b>Mineral Resources Permit Manager</b>	

RIG: Nabors B22  
NDIC#: 22099

**Yukon 5301 41-12T  
WELLBORE SCHEMATIC**

API #: 33-053-03911  
FORMATION: Three Forks  
FIELD: Baker



**OASIS PETROLEUM NA LLC**

**Yukon 5301 41-12T**  
T153N-R101W Sec. 12 (SHL) – Drilling Sec. 13 & 24  
255' FSL & 710' FWL Sec. 12

Status: Drilling  
McKenzie County, North Dakota  
Updated: 7/8/2013 MGB

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

**SURFACE CASING AND CEMENT DESIGN**

Size	Interval		Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
	From	To						Minimum	Optimum	Max
9-5/8"	0	2119	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse	Burst	Tension	Cost per ft
		(psi) / a	(psi) / b	(1000 lbs) / c	
0' - 2119'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.04	3520 / 3.55	453 / 2.73	

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.0 ppg fluid on backside (2119' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2119' setting depth).
- c) Based on string weight in 9.0 ppg fluid at 2119' TVD plus 100k# overpull.  
(Buoyed weight equals 66k lbs.)

Cement volumes are based on 9-5/8" casing set in 13-1/2" hole with 60% excess to circulate cement back to surface.  
Mix and pump the following slurry.

**Pre-flush (Spacer):      20 bbls fresh water**

**Lead Slurry:**      **437 sks** (225 bbls), 11.5 lb/gal, 2.90 cu. ft./sk Conventional Class G Cement with 4.0% BWOB Extender, 2.0% BWOB Expanding Agent, 2.0% CaCl<sub>2</sub>, and 0.250 lb/sk Lost Circulation Additive

**Tail Slurry:**      **337 sks** (70 bbls), 15.8 lb/gal, 1.16 cu. ft./sk Conventional Class G Cement with 0.25% BWOB CaCl<sub>2</sub>, and 0.250 lb/sk Lost Circulation Agent

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

INTERMEDIATE CASING AND CEMENT DESIGN

Size	Interval	Weight	Grade	Coupling	I.D.	Drift**	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
7"	0' -11150'	32	HCP-110	LTC	6.094"	6.000***	6,730	8,970	9,870

\*\*Special Drift 7" 32# to 6.0".

Interval	Length	Description	Collapse (psi) a	Burst (psi) b	Tension (1000 lbs) c	Condition
0' -11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 2.10*	12,460 / 1.19	797/2.03	New
0' -11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 1.07**	12,460 / 1.19		New

API Rating & Safety Factor

- a. \*Assume full casing evacuation with 10 ppg fluid on backside. \*\*Assume full casing evacuation with 1.2 psi/ft equivalent fluid gradient across salt intervals (from **6385'** to **10335'**).
- b. Burst pressure based on 9,000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9.0 ppg fluid on backside—to **10812'** TVD.
- c. Based on string weight in 10 ppg fluid, (**302k** lbs buoyed weight) plus 100k lbs overpull.

Cement volumes are estimates based on 7" casing set in an 8-3/4" hole with 30% excess.

**Pre-flush (Spacer):**      **50 bbls** Saltwater  
**20 bbls** CW8  
**20 bbls** Freshwater

**Lead Slurry:**      **184 sks** (85 bbls), 11.8 ppg, 2.59 cu. ft./sk 65:35 POZ Cement with 6% BWOB Extender, 0.15% BWOB Viscosifier, 0.8% BWOB Fluid Loss Additive, 0.2% BWOB Anti Foam, and 0.259 lb/sk Lost Circulation Additive

**Tail Slurry:**      **568 sks** (166 bbls), 15.6 ppg, 1.64 cu. ft./sk Conventional Class G Cement with 10.0% BWOB NaCL, 35.0% BWOB Silica Flour, 0.2% BWOB Fluid Loss, 0.27% BWOB Retarder, 0.2% BWOB Anti Foam, and 0.25 lb/sk Lost Circulation Additive

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

**PRODUCTION LINER**

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10285'-21275'	13.5	P-110	BTC	3.92"	3.795"	2,270	3,020	3,780

Interval	Length	Description	Collapse	Burst	Tension	Condition
			(psi) a	(psi) b	(1000 lbs) c	
10285'-21275'	10991'	4-1/2", 13.5 lb, P-110, BTC	10670 / 2.00	12410 / 1.19	422 / 2.03	New

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10812' TVD.
- b) Burst pressure based on 9,000 psi treating pressure with 10.2 ppg internal fluid gradient and 9.0 ppg external fluid gradient @ 10812' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 108k lbs.) plus 100k lbs overpull.

**Cemented Liner** – Based on 4.5" liner from TD to liner top, 10% excess.

**Pre-flush (Spacer):**      **30 bbls** MudPushII, 12lb/gal

**Lead Slurry:**      **640 sks** (181 bbls) 14.80 lb/gal Conventional CEMENT with 61.1 lb/sk D907 Cement, 23.45lb/sk D035-BCA Cementing Additive, 0.2% D065 Dispersant, 0.2% D046 Anti Foam, 0.4% D167 Fluid Loss, 35% D066 Silica, 0.4% D198 Retarder

DRILLING PLAN						
OPERATOR	Oasis Petroleum			COUNTY/STATE	McKenzie Co., ND	
WELL NAME	YUKON 5301 41-12T			RIG	Nabors B22	
WELL TYPE	Horizontal Three Forks			Surface Location (survey plat):	250' fsl	
LOCATION	SWSW 12-153N-101W			710' fwl		
EST. T.D.	21,275'			GROUND ELEV:	2094 Finished Pad Elev.	
TOTAL LATERAL:	10,125' (est)			KB ELEV:	2119 Sub Height: 25	
PROGNOSIS:	Based on 2,119' KB(est)			LOGS:	Type Interval	
MARKER	DEPTH (Surf Loc)		DATUM (Surf Loc)	OH Logs: Triple Combo KOP to Kirby (or min run of 1800' whichever is greater); GR/Res to BSC GR to surf; CND through the Dakota CBL/GR: Above top of cement/GR to base of casing MWD GR: KOP to lateral TD REQUEST LOG WAIVER Gulf Oil Lindvig 1-11-3C 1496' NW 153N 101W S11		
Pierre	NDIC MAP	2,019	100'			
Greenhorn		4,629	-2,510'			
Mowry		5,020	-2,901'			
Dakota		5,447	-3,328'			
Rierdon		6,365	-4,246'			
Dunham Salt		6,885	-4,766'			
Dunham Salt Base		6,961	-4,842'			
Spearfish		6,966	-4,847'			
Pine Salt		7,271	-5,152'			
Pine Salt Base		7,326	-5,207'			
Opecche Salt		7,355	-5,236'			
Opecche Salt Base		7,395	-5,276'			
Broom Creek (Top of Minnelusa Gp.)		7,599	-5,480'			
Amsden		7,657	-5,538'			
Tyler		7,845	-5,726'			
Otter (Base of Minnelusa Gp.)		8,018	-5,899'			
Kibbey		8,369	-6,250'			
Charles Salt		8,515	-6,396'			
UB		9,141	-7,022'			
Base Last Salt		9,217	-7,098'			
Ratcliffe		9,262	-7,143'			
Mission Canyon		9,437	-7,318'			
Lodgepole		10,000	-7,881'			
Lodgepole Fracture Zone		10,177	-8,058'			
False Bakken		10,699	-8,580'			
Upper Bakken		10,707	-8,588'			
Middle Bakken		10,717	-8,598'			
Lower Bakken		10,780	-8,641'			
Pronghorn		10,772	-8,653'			
Three Forks		10,789	-8,670'			
Three Forks Target Top		10,797	-8,678'			
Three Forks Target Base		10,813	-8,694'			
Claystone		10,817	-8,698'			
Dip Rate:	overall +0.06° or .10'/100' up (complex)					
Max. Anticipated BHP:	4679					
MUD:	Interval	Type	WT	Vis	WL	Remarks
Surface:	0' -	2,119' FW/Gel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks
Intermediate:	2,119' -	11,150' Invert	9.5-10.4	40-50	30+HHP	Circ Mud Tanks
Laterals:	11,150' -	21,275' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks
CASING:	Size	Wt pdf	Hole	Depth	Surface Formation: Glacial till	
Surface:	9-5/8"	36#	13-1/2"	2,119'	To Surface	12
Intermediate:	7"	32#	8-3/4"	11,150'		24
Production Liner:	4 1/2"	13 1/2"	6"	21,275'	TOL @ 10,290'	24
PROBABLE PLUGS, IF REQ'D:						
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI
Surface:	2,119	2,119	255' FSL	710' FWL	Sec. 12 T153N-R101W	Survey Company:
KOP:	10,335'	10,335'	255' FSL	710' FWL	Sec. 12 T153N-R101W	Build Rate: 12 deg /100'
EOC:	11,085'	10,812'	159' FNL	948' FWL	Sec. 13 T153N-R101W	150.0
Casing Point:	11,150'	10,812'	215' FNL	981' FWL	Sec. 13 T153N-R101W	150.0
Middle Bakken Lateral TD:	21,275'	10,796'	250' FSL	1300' FWL	Sec. 24 T153N-R101W	179.9
Comments:						
DRILL TO KOP						
DRILL CURVE TO 90 DEG AND 7" CASING POINT						
SET 7" CASING DRILL THREE FORKS LATERAL.						
MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral.						
MWD GR to be run from KOP to Lateral TD.						
36 Stage Cemented Liner P&P						
<b>OASIS</b> METRO-EURO						
Geology: 1/0/1900						Engineering: M. Brown 7-8-2013

Comments:

DRILL TO KOP  
DRILL SURVEY

DRILL CURVE TO 90 DEG AND 7" CASING POINT  
SET 71 CASING DRILL THREE FORKS LATERAL

SET 7" CASING. DRILL THREE FORKS LATERAL.  
MATERIALS

MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral.

MWD GR to be run from KOP to Lateral TD

#### **36 Stage Cemented Liner P&P**



Geology: 1/0/1900

Engineering: M. Brown 7-8-2013

Holweger, Todd L.

Todd  
Comments

**From:** Todd Holweger <toddholweger@gmail.com>  
**Sent:** Monday, July 15, 2013 6:44 AM  
**To:** Holweger, Todd L.  
**Subject:** Fwd: Yukon 5301 41-12T Form 4

Sent from my iPhone

Begin forwarded message:

**From:** "Holweger, Todd L." <[tholweger@nd.gov](mailto:tholweger@nd.gov)>  
**Date:** July 7, 2013, 5:05:47 PM CDT  
**To:** Mike Brown <[mbrown@oasispetroleum.com](mailto:mbrown@oasispetroleum.com)>  
**Cc:** Jen Harold <[jharold@oasispetroleum.com](mailto:jharold@oasispetroleum.com)>, Heather McCowan <[hmccowan@oasispetroleum.com](mailto:hmccowan@oasispetroleum.com)>, "Hvinden, Dave C." <[dhvinden@nd.gov](mailto:dhvinden@nd.gov)>, "Suggs, Richard A." <[rasuggs@nd.gov](mailto:rasuggs@nd.gov)>, "[toddholweger@gmail.com](mailto:toddholweger@gmail.com)" <[toddholweger@gmail.com](mailto:toddholweger@gmail.com)>, "Dunn, Richard S." <[rsdunn@nd.gov](mailto:rsdunn@nd.gov)>  
**Subject: RE: Yukon 5301 41-12T Form 4**

Mike:

Oasis will need to plan for cement isolation on the 4.5" liner since perfs are at 48' from the south line (outside the spacing unit). Please submit a plan on a Form 4 accordingly and include a schematic.

Option #1: Cement entire 4.5" liner from TD to liner top

Option #2: Cement from port on 4.5" liner (needs to be 200' past 7" casing point=>676 S) to top of liner.

Either option will require a CBL to be run across the hardline and back up into 7".

Thanks,

Todd

NDIC

<mime-attachment>



# SUNDRY NOTICE AND REPORTS ON WELLS - FORM

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>June 24, 2013</b>
<input type="checkbox"/> Report of Work Done	Date Work Completed
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	
Approximate Start Date	

<input type="checkbox"/> Drilling Program	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Other	<b>Pit as Built</b>

Well Name and Number <b>Yukon 5301 41-12T</b>					
Footages	Qtr-Qtr	Section	Township	Range	
<b>255 F S L</b>	<b>650 F W L</b>	<b>SWSW</b>	<b>12</b>	<b>153 N</b>	<b>101 W</b>
Field	Pool	County <b>McKenzie</b>			
	<b>Bakken</b>				

## 24-HOUR PRODUCTION RATE

Before	After
Oil	Bbls
Water	Bbls
Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

## DETAILS OF WORK

Please see the attached plats showing the pit for the Yukon 5301 41-12T as built.

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9591</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature <i>Chelsea Covington</i>	Printed Name <b>Chelsea Covington</b>	
Title <b>Regulatory Assistant</b>	Date <b>June 24, 2013</b>	
Email Address <b>ccovington@oasispetroleum.com</b>		

## FOR STATE USE ONLY

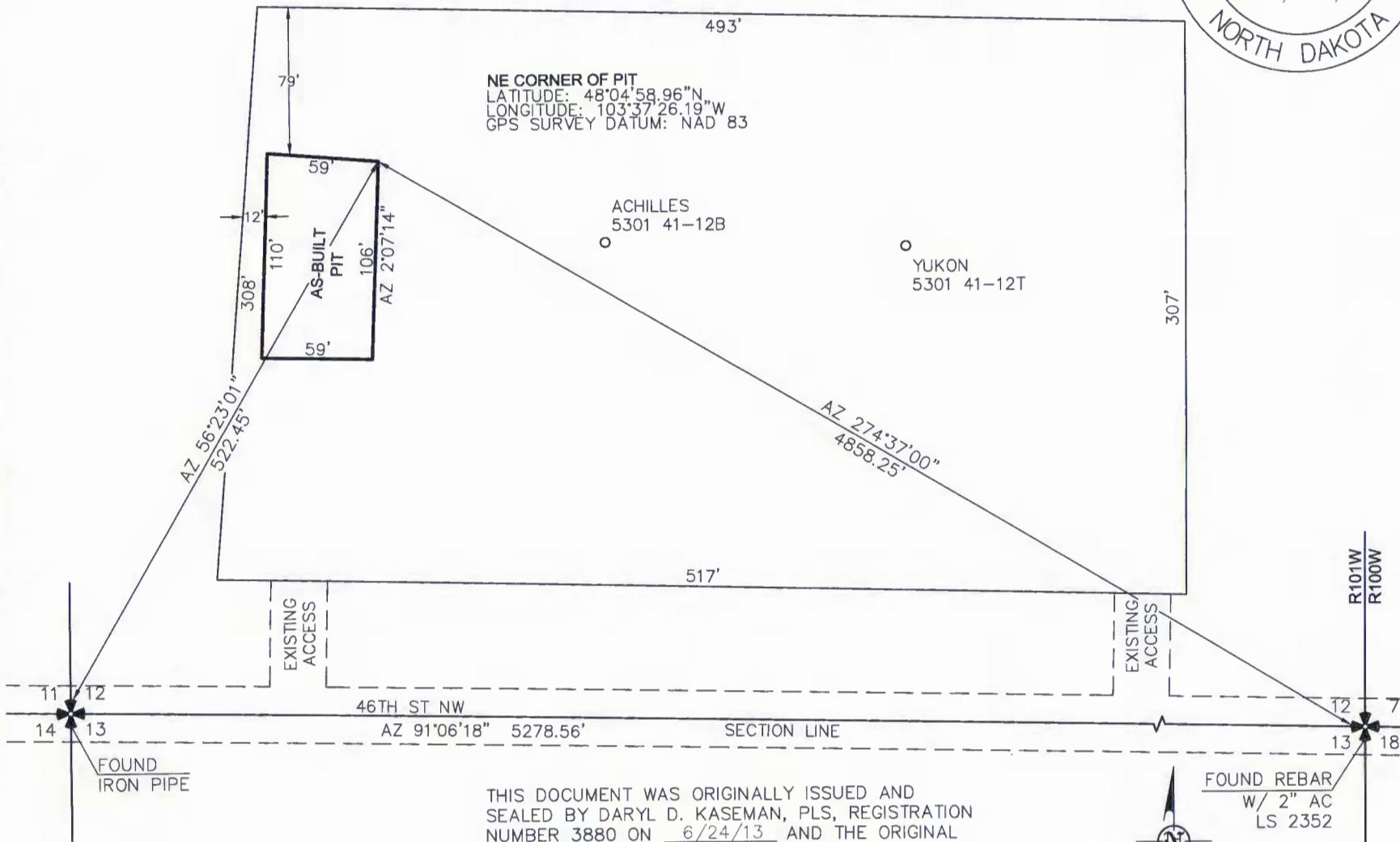
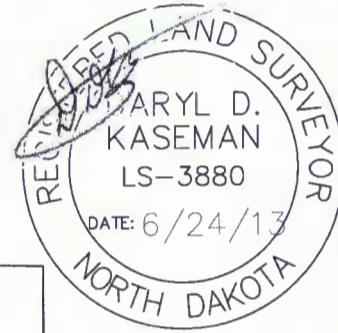
<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date <i>6-27-13</i>	
By <i>Covington</i>	
Title <i>Regulatory Assistant</i>	

# PIT AS-BUILT

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



NOTE: All utilities shown are preliminary only, a complete  
utilities location is recommended before construction.

Project No.	Date	By	Description
OASIS PETROLEUM NORTH AMERICA, LLC			
PIT AS-BUILT			
SECTION 12, T153N, R101W			
MCKENZIE COUNTY, NORTH DAKOTA			
Drawn By:	S1109-339	Checked By:	JUNE 2013
B.L.H.	D.J.K.		

Project No.	Date	Description	
OASIS PETROLEUM NORTH AMERICA, LLC			
PIT AS-BUILT			
SECTION 12, T153N, R101W			
MCKENZIE COUNTY, NORTH DAKOTA			
Drawn By:	S1109-339	Checked By:	JUNE 2013
B.L.H.	D.J.K.		

Interstate Engineering, Inc.
P.O. Box 648
425 East Main Street
Sidney, Montana 59270
Ph. (406) 433-3617
Fax. (406) 433-3618
www.interstateeng.com
Other offices in Minnesota, North Dakota and South Dakota



© 2013, INTERSTATE ENGINEERING, INC.

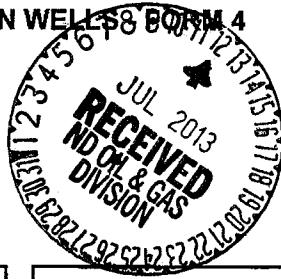
1/1  
SHEET NO.



# SUNDY NOTICES AND REPORTS ON WELLS FORM 4

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (08-2006)

Well File No.  
**22099**



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>July 8, 2013</b>
<input type="checkbox"/> Report of Work Done	Date Work Completed
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	
Approximate Start Date	

<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input checked="" type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Other	

Well Name and Number  
**Yukon 5301 41-12T**

Footages <b>255 F S L</b>	Qtr-Qtr <b>650 F W L</b>	Section <b>SWSW</b>	12	Township <b>153 N</b>	Range <b>101 W</b>
Field <i>Baker</i>	Pool <b>Bakken</b>	County <b>McKenzie</b>			

## 24-HOUR PRODUCTION RATE

Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

## DETAILS OF WORK

We respectfully request permission to revise the APD issued for this well to include the following change:

Cement entire 4.5" liner from TD to line top.

Attached is the new drill plan, wellbore schematic, and well summary.

\*Heel perf must be no less than 676 S. Also  
Isolation & confirmation of NDIC compliance will  
be determined via CBL.

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9563</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature <i>Heather McCowan</i>	Printed Name <b>Heather McCowan</b>	
Title <b>Regulatory Assistant</b>	Date <b>July 8, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

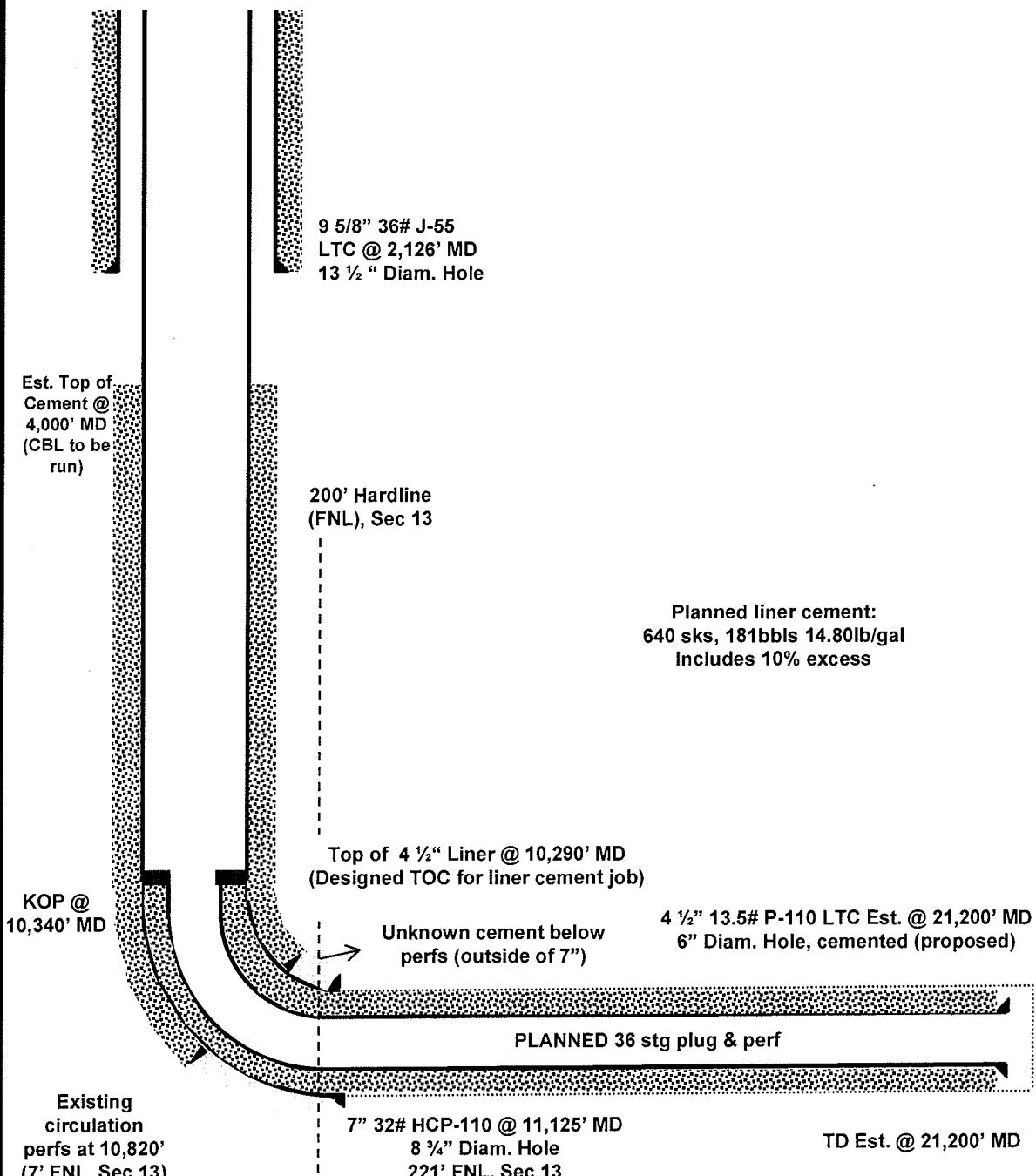
## FOR STATE USE ONLY

<input checked="" type="checkbox"/> Received *	<input type="checkbox"/> Approved
Date <b>7/12/13</b>	
By <i>Tom Loflin</i>	
Title <b>Mineral Resources Permit Manager</b>	

RIG: Nabors B22  
NDIC#: 22099

**Yukon 5301 41-12T  
WELLBORE SCHEMATIC**

API #: 33-053-03911  
FORMATION: Three Forks  
FIELD: Baker



**OASIS PETROLEUM NA LLC**

**Yukon 5301 41-12T**  
T153N-R101W Sec. 12 (SHL) – Drilling Sec. 13 & 24  
255' FSL & 710' FWL Sec. 12

Status: Drilling  
McKenzie County, North Dakota  
Updated: 7/8/2013 MGB

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

**SURFACE CASING AND CEMENT DESIGN**

Size	Interval						Make-up Torque (ft-lbs)			
	From	To	Weight	Grade	Coupling	I.D.	Drift	Minimum	Optimum	Max
9-5/8"	0	2119	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse (psi) / a	Burst (psi) / b	Tension (1000 lbs) / c	Cost per ft
0' - 2119'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.04	3520 / 3.55	453 / 2.73	

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.0 ppg fluid on backside (2119' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2119' setting depth).
- c) Based on string weight in 9.0 ppg fluid at 2119' TVD plus 100k# overpull.  
(Buoyed weight equals 66k lbs.)

Cement volumes are based on 9-5/8" casing set in 13-1/2" hole with 60% excess to circulate cement back to surface.  
Mix and pump the following slurry.

**Pre-flush (Spacer):      20 bbls** fresh water

**Lead Slurry:**      437 sks (225 bbls), 11.5 lb/gal, 2.90 cu. ft./sk Conventional Class G Cement with 4.0% BWOB Extender, 2.0% BWOB Expanding Agent, 2.0% CaCl<sub>2</sub>, and 0.250 lb/sk Lost Circulation Additive

**Tail Slurry:**      337 sks (70 bbls), 15.8 lb/gal, 1.16 cu. ft./sk Conventional Class G Cement with 0.25% BWOB CaCl<sub>2</sub>, and 0.250 lb/sk Lost Circulation Agent

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

INTERMEDIATE CASING AND CEMENT DESIGN

Size	Interval	Weight	Grade	Coupling	I.D.	Drift**	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
7"	0' - 11150'	32	HCP-110	LTC	6.094"	6.000***	6,730	8,970	9,870

\*\*Special Drift 7" 32# to 6.0".

Interval	Length	Description	Collapse (psi) a	Burst (psi) b	Tension (1000 lbs) c	Condition
0' - 11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 2.10*	12,460 / 1.19	797/2.03	New
0' - 11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 1.07**	12,460 / 1.19		New

API Rating & Safety Factor

- a. \*Assume full casing evacuation with 10 ppg fluid on backside. \*\*Assume full casing evacuation with 1.2 psi/ft equivalent fluid gradient across salt intervals (from 6385' to 10335').
- b. Burst pressure based on 9,000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9.0 ppg fluid on backside—to 10812' TVD.
- c. Based on string weight in 10 ppg fluid, (302k lbs buoyed weight) plus 100k lbs overpull.

Cement volumes are estimates based on 7" casing set in an 8-3/4" hole with 30% excess.

**Pre-flush (Spacer):**      **50 bbls Saltwater**  
**20 bbls CW8**  
**20 bbls Freshwater**

**Lead Slurry:**      **184 sks** (85 bbls), 11.8 ppg, 2.59 cu. ft./sk 65:35 POZ Cement with 6% BWOB Extender, 0.15% BWOB Viscosifier, 0.8% BWOB Fluid Loss Additive, 0.2% BWOB Anti Foam, and 0.259 lb/sk Lost Circulation Additive

**Tail Slurry:**      **568 sks** (166 bbls), 15.6 ppg, 1.64 cu. ft./sk Conventional Class G Cement with 10.0% BWOB NaCL, 35.0% BWOB Silica Flour, 0.2% BWOB Fluid Loss, 0.27% BWOB Retarder, 0.2% BWOB Anti Foam, and 0.25 lb/sk Lost Circulation Additive

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
McKenzie County, ND**

**PRODUCTION LINER**

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10285'-21275'	13.5	P-110	BTC	3.92"	3.795"	2,270	3,020	3,780

Interval	Length	Description	Collapse	Burst	Tension	Condition
			(psi) a	(psi) b	(1000 lbs) c	
10285'-21275'	10991'	4-1/2", 13.5 lb, P-110, BTC	10670 / 2.00	12410 / 1.19	422 / 2.03	New

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10812' TVD.
- b) Burst pressure based on 9,000 psi treating pressure with 10.2 ppg internal fluid gradient and 9.0 ppg external fluid gradient @ 10812' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 108k lbs.) plus 100k lbs overpull.

**Cemented Liner** – Based on 4.5" liner from TD to liner top, 10% excess.

**Pre-flush (Spacer):**      30 bbls MudPushII, 12lb/gal

**Lead Slurry:**      640 sks (181 bbls) 14.80 lb/gal Conventional CEMENT with 61.1 lb/sk D907 Cement, 23.45lb/sk D035-BCA Cementing Additive, 0.2% D065 Dispersant, 0.2% D046 Anti Foam, 0.4% D167 Fluid Loss, 35% D066 Silica, 0.4% D198 Retarder

DRILLING PLAN							
OPERATOR	Oasis Petroleum			COUNTY/STATE	McKenzie Co., ND		
WELL NAME	YUKON 5301 41-12T			RIG	Nabors B22		
WELL TYPE	Horizontal Three Forks						
LOCATION	SWSW 12-153N-101W		Surface Location (survey plat): 250' (sl)	710' fwl	GROUND ELEV:	2094 Finished Pad Elev.	Sub Height: 25
EST. T.D.	21,275'				KB ELEV:	2119	
TOTAL LATERAL:	10,125' (est)						
PROGNOSIS:	Based on 2,119' KB(est)			LOGS:	Type	Interval	
MARKER	DEPTH (Surf Loc)	DATUM (Surf Loc)			OH Logs: Triple Combo KOP to Kirby (or min run of 1800' whichever is greater); GR/Res to BSC; GR to surf; CND through the Dakota		
Pierre	NDIC MAP	2,019	100'		CBL/GR: Above top of cement/GR to base of casing		
Greenhorn		4,629	-2,510'		MWD GR: KOP to lateral TD		
Mowry		5,020	-2,901'		REQUEST LOG WAIVER Gulf Oil Lindvig 1-11-3C 1496' NW 153N 101W S11		
Dakota		5,447	-3,328'	DEVIATION:			
Rierdon		6,365	-4,246'		Surf: 3 deg. max., 1 deg / 100'; surv every 500'		
Dunham Salt		6,885	-4,766'		Prod: 5 deg. max., 1 deg / 100'; surv every 100'		
Dunham Salt Base		6,961	-4,842'				
Spearfish		6,966	-4,847'				
Pine Salt		7,271	-5,152'				
Pine Salt Base		7,326	-5,207'				
Opecche Salt		7,355	-5,236'				
Opecche Salt Base		7,395	-5,276'				
Broom Creek (Top of Minnelusa Gp.)		7,599	-5,480'				
Amsden		7,657	-5,538'				
Tyler		7,845	-5,726'				
Otter (Base of Minnelusa Gp.)		8,018	-5,899'				
Kibbey		8,369	-6,250'				
Charles Salt		8,515	-6,396'				
UB		9,141	-7,022'				
Base Last Salt		9,217	-7,098'				
Ratcliffe		9,262	-7,143'				
Mission Canyon		9,437	-7,318'				
Lodgepole		10,000	-7,881'				
Lodgepole Fracture Zone		10,177	-8,058'				
False Bakken		10,699	-8,580'				
Upper Bakken		10,707	-8,588'				
Middle Bakken		10,717	-8,598'				
Lower Bakken		10,780	-8,641'				
Pronghorn		10,772	-8,653'				
Three Forks		10,789	-8,670'				
Three Forks Target Top		10,797	-8,678'				
Three Forks Target Base		10,813	-8,694'				
Claystone		10,817	-8,698'				
Dip Rate:	overall +0.06° or .10' /100' up (complex)						
Max. Anticipated BHP:	4679			Surface Formation:	Glacial till		
MUD:	Interval	Type	WT	Vis	WL	Remarks	
Surface:	0' -	2,119' FW/Gel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,119' -	11,150' Invert	9.5-10.4	40-50	30+HHp	Circ Mud Tanks	
Lateral:	11,150' -	21,275' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks	
CASING:	Size	Wt pfp	Hole	Depth	Cement	WOC	Remarks
Surface:	9-5/8"	36#	13-1/2"	2,119'	To Surface	12	100' into Pierre
Intermediate:	7"	32#	8-3/4"	11,150'	3,947'	24	1500' above Dakota
Production Liner:	4.5"	13 1/2"	6"	21,275'	TOL @ 10,290'	10,290'	50' above KOP
PROBABLE PLUGS, IF REQ'D:							
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI	
Surface:	2,119	2,119	255' FSL	710' FWL	Sec. 12 T153N-R101W		Survey Company:
KOP:	10,335'	10,335'	255' FSL	710' FWL	Sec. 12 T153N-R101W		Build Rate: 12 deg /100'
EOC:	11,085'	10,812'	159' FNL	948' FWL	Sec. 13 T153N-R101W	150.0	
Casing Point:	11,150'	10,812'	215' FNL	981' FWL	Sec. 13 T153N-R101W	150.0	
Middle Bakken Lateral TD:	21,275'	10,796'	250' FSL	1300' FWL	Sec. 24 T153N-R101W	179.9	
Comments:							
DRILL TO KOP							
DRILL CURVE TO 90 DEG AND 7" CASING POINT							
SET 7" CASING. DRILL THREE FORKS LATERAL.							
MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral.							
MWD GR to be run from KOP to Lateral TD.							
36 Stage Cemented Liner P&P							
							
Geology:	1/0/1900						
	Engineering: M. Brown 7-8-2013						

*Td Comments*

**Holweger, Todd L.**

**From:** Todd Holweger <toddholweger@gmail.com>  
**Sent:** Monday, July 15, 2013 6:44 AM  
**To:** Holweger, Todd L.  
**Subject:** Fwd: Yukon 5301 41-12T Form 4

Sent from my iPhone

Begin forwarded message:

**From:** "Holweger, Todd L." <[tholweger@nd.gov](mailto:tholweger@nd.gov)>  
**Date:** July 7, 2013, 5:05:47 PM CDT  
**To:** Mike Brown <[mbrown@oasispetroleum.com](mailto:mbrown@oasispetroleum.com)>  
**Cc:** Jen Harold <[jharold@oasispetroleum.com](mailto:jharold@oasispetroleum.com)>, Heather McCowan <[hmccowan@oasispetroleum.com](mailto:hmccowan@oasispetroleum.com)>, "Hvinden, Dave C." <[dhvinden@nd.gov](mailto:dhvinden@nd.gov)>, "Suggs, Richard A." <[rasuggs@nd.gov](mailto:rasuggs@nd.gov)>, "[toddholweger@gmail.com](mailto:toddholweger@gmail.com)" <[toddholweger@gmail.com](mailto:toddholweger@gmail.com)>, "Dunn, Richard S." <[rsdunn@nd.gov](mailto:rsdunn@nd.gov)>  
**Subject:** RE: Yukon 5301 41-12T Form 4

Mike:

Oasis will need to plan for cement isolation on the 4.5" liner since perfs are at 48' from the south line (outside the spacing unit). Please submit a plan on a Form 4 accordingly and include a schematic.

Option #1: Cement entire 4.5" liner from TD to liner top

Option #2: Cement from port on 4.5" liner (needs to be 200' past 7" casing point=>676 S) to top of liner.

Either option will require a CBL to be run across the hardline and back up into 7".

Thanks,

Todd

NDIC

<mime-attachment>



## SUNDRY NOTICES AND REPORTS ON WELLS

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.  
**22099**



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>June 18, 2013</b>
<input type="checkbox"/> Report of Work Done	Date Work Completed
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	
Approximate Start Date	

<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input checked="" type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Other _____	

Well Name and Number  
**Yukon 5301 41-12T**

Footages	Qtr-Qtr	Section	Township	Range
255 F S L	710 F W L	SWSW	12	153 N 101 W
Field	Pool	County		
Baker	Bakken	McKenzie		

24-HOUR PRODUCTION RATE			
Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

### DETAILS OF WORK

Oasis Petroleum is respectfully seeking permission to make the follow amendment to our well design on the Yukon 5301 41-12T:

Run two open hole swell packers directly outside of the 7" casing shoe, and a single open hole swell packer directly inside of the 7" casing, below the perforations. Perforations in our 4.5" liner for the purpose of fracture stimulation and production will be below the prior mentioned swell packers. — *Denied perf outside SSW.*

The reason for the change request is that circulation was lost after getting 7" casing to TD, in the Three Forks formation. Permission was granted by John Axtman to perforate 7" casing in the Middle Bakken with 8 x 1 1/2" holes at a depth of 10,820' MD (10,739' TVD). The 7" casing shoe is at 11,125' MD (476' south of the SHL). The 200' hardline is 455' south of SHL. The perforations shot at 10,820' MD are 207' south of SHL (7' FNL). The 7" casing shoe is across the hardline, but the perforations are not.

As a result of the likely case that there is not sufficient cement isolation across the hardline, Oasis Petroleum is respectfully requesting permission to use the swellable packer configuration described above in order to achieve isolation prior to fracture stimulation. — *Denied must isolate w/cnt.*

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>(281) 404-9634</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Mike Brown</b>	
Title <b>Drilling Engineer II</b>	Date <b>July 5, 2013</b>	
Email Address <b>mbrown@oasispetroleum.com</b>		

<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date <b>7/12/13</b>	
By 	
Title <b>Mineral Resources Permit Manager</b>	



# SUNDY NOTICE AND REPORTS ON WELLS - FORM A

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.  
**22099**



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>June 6, 2013</b>	<input type="checkbox"/> Drilling Program	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date	<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input checked="" type="checkbox"/> Other      location revision	

Well Name and Number <b>Yukon 5301 41-12T</b>					
Footages	W	Qtr-Qtr	Section	Township	Range
255 F S L	650 F E L	SWSW	12	153 N	101 W
Field	Pool			County	
<b>Baker</b>	<b>Bakken</b>			<b>McKenzie</b>	

24-HOUR PRODUCTION RATE			
Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)			
Address		City	State
			Zip Code

## DETAILS OF WORK

We respectfully request permission to revise the APD issued for this well to include the following change:  
The surface location will change to 255' FSL & 710' FWL, Sec. 12-153N-101W. (This modification was made to accomodate the drilling rigs)  
Correlating to this surface location the new casing point will be 215' FNL & 981' FWL, Sec. 13-153N-101W

The following statements remain true:

Notice has been provided to the owner of any permanently occupied dwelling within 1320 feet.  
This well is not located within 500 feet of an occupied dwelling.

Attached is the new well plat, drill plan, directional plan, and directional plot.

Company <b>Oasis Petroleum Inc.</b>		Telephone Number <b>(281) 404-9563</b>
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>		State <b>TX</b>
Signature 		Printed Name <b>Heather McCowan</b>
Title <b>Regulatory Assistant</b>	Date <b>June 6, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

FOR STATE USE ONLY	
<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>6-7-13</b>	
By 	
Title <b>Petroleum Resource Specialist</b>	

**WELL LOCATION PLAT**  
OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002  
"YUKON" 5301 41-12T  
**255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE**  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

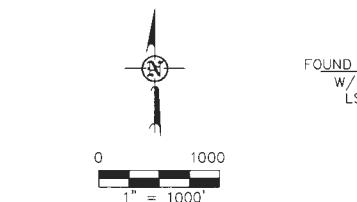
THIS DOCUMENT WAS ORIGINALLY  
ISSUED AND SEALED BY DARYL D.  
KASEMAN, PLS. REGISTRATION NUMBER  
3880 ON 5/05/13 AND THE ORIGINAL  
DOCUMENTS ARE STORED AT THE  
OFFICES OF INTERSTATE ENGINEERING,  
INC.



STAKED ON 11/17/11  
VERTICAL CONTROL DATUM WAS BASED UPON  
CONTROL POINT 13 WITH AN ELEVATION OF 2090.8'

THIS SURVEY AND PLAT IS BEING PROVIDED AT THE REQUEST OF FABIAN KJORSTAD OF OASIS PETROLEUM. I CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DARYL D. KASEMAN LS-3880



 - MONUMENT - RECOVERED  
 - MONUMENT - NOT RECOVERED

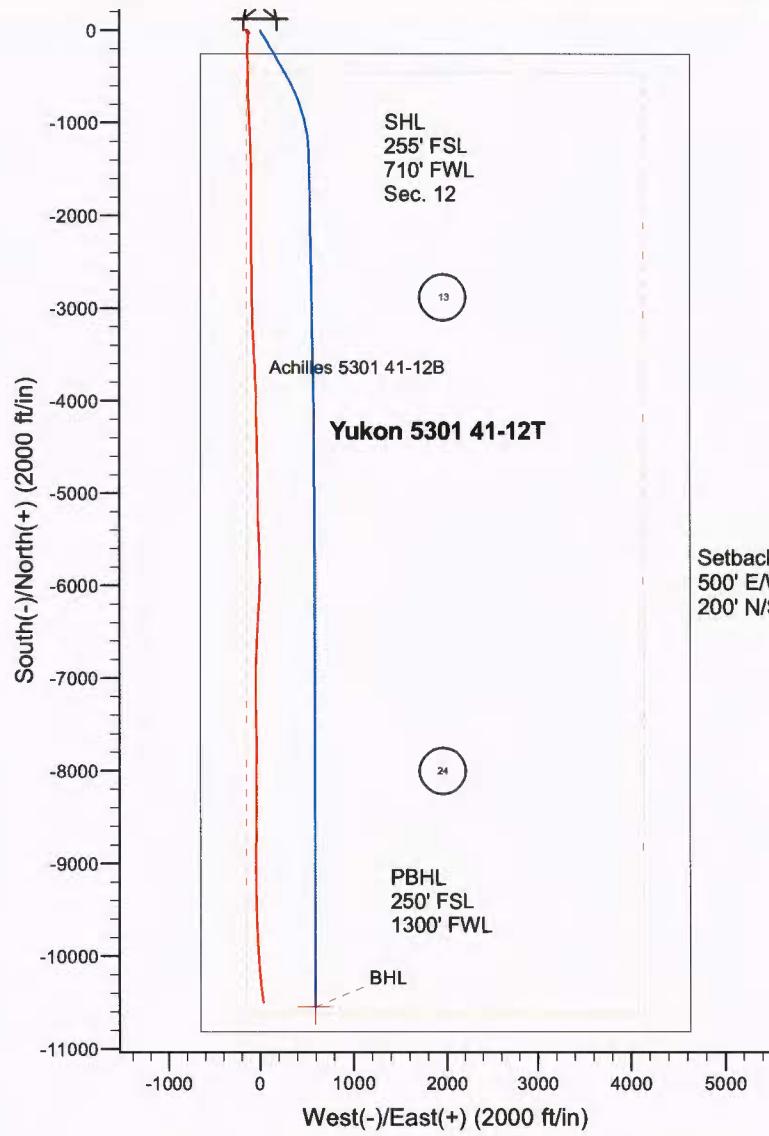


© 2011, INTERSTATE ENGINEERING, INC.

**Interstate Engineering, Inc.**  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax (406) 433-5818  
[www.interstateeng.com](http://www.interstateeng.com)

OASIS PETROLEUM NORTH AMERICA, LLC  
WELL LOCATION PLAT  
SECTION 12, T153N, R101W

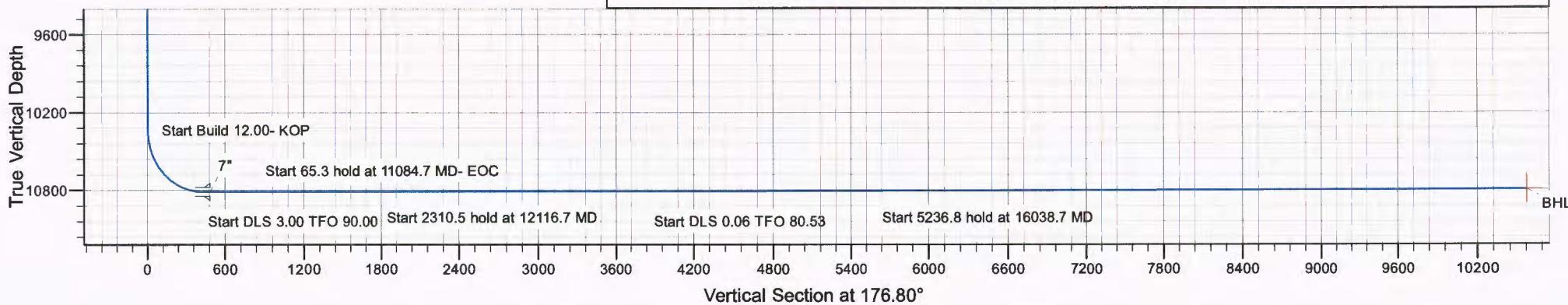
Revision No.	Date	By	Description
REV 1	12/6/11	JJS	MOVED BOTTOM HOLE
REV 2	12/13/11	JWS	CHANGED TO DOUBLE PAD
REV 3	2/5/13	BHM	MOVED BOTTOM HOLE / CHANGED NAME
REV 4	5/6/11	JJS	MOVED WELL BD EAST
REV 5	12/13/11	JWS	MOVED WELL BD WEST
REV 6	12/13/11	JWS	MOVED 2 HOLE LOC 17, 18, A, B, C, D, E, F
REV 7	12/13/11	JWS	MOVED 2 HOLE LOC 17, 18, A, B, C, D, E, F
REV 8	6/4/2012	JWS	MOVED 2 HOLE LOC 17, 18, A, B, C, D, E, F



WELL DETAILS: Yukon 5301 41-12T											
Northing 125116.85	Easting 367412.41	Latitude 48° 4' 58.500 N	Longitude 103° 37' 22.076 W	Ground Level: 2094.0							
Project: Indian Hills Site: 153N-101W-13/24 Well: Yukon 5301 41-12T Wellbore: Yukon 5301 41-12T Design: Design #1											
Azimuths to True North Magnetic North: 8.35°											
		Magnetic Field Strength: 56593.9nT Dip Angle: 73.03° Date: 3/12/2013 Model: IGRF200510									
CASING DETAILS											
TVD 2119.0 10812.2	MD 2119.0 11150.0	Name 9 5/8" 7"	Size 9.625 7.000								
SECTION DETAILS											
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	Target				
0.0	0.00	0.00	0.0	0.0	0.0	0.00					
10334.7	0.00	0.00	10334.7	0.0	0.0	0.00					
11084.7	90.00	150.00	10812.2	-413.5	238.7	12.00					
11150.0	90.00	150.00	10812.2	-470.0	271.4	0.00					
12116.7	90.00	179.00	10812.2	-1391.6	527.0	3.00					
14427.2	90.00	179.00	10812.2	-3701.8	567.3	0.00					
16038.7	90.15	179.92	10810.0	-5313.2	582.5	0.06					
21275.5	90.15	179.92	10796.0	-10550.0	589.9	0.00	BHL				

True Vertical Depth (450 ft/in)

Vertical Section at 176.80° (450 ft/in)



**OASIS**  
PETROLEUM

# **Oasis**

**Indian Hills**

**153N-101W-13/24**

**Yukon 5301 41-12T**

**T153N R101W SEC 12**

**Yukon 5301 41-12T**

**Plan: Design #1**

# **Standard Planning Report**

**04 June, 2013**

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T							
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)							
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)							
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True							
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature							
<b>Wellbore:</b>	Yukon 5301 41-12T									
<b>Design:</b>	Design #1									
<b>Project</b>	Indian Hills									
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level							
<b>Geo Datum:</b>	North American Datum 1983									
<b>Map Zone:</b>	North Dakota Northern Zone									
<b>Site</b>	153N-101W-13/24									
<b>Site Position:</b>		<b>Northing:</b>	125,067.66 m							
<b>From:</b>	Lat/Long	<b>Easting:</b>	368,214.56 m							
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in							
			<b>Latitude:</b> 48° 4' 57.960 N							
			<b>Longitude:</b> 103° 36' 43.250 W							
			<b>Grid Convergence:</b> -2.32 °							
<b>Well</b>	Yukon 5301 41-12T									
<b>Well Position</b>	+N/-S +E/-W	54.9 ft -2,636.1 ft	<b>Northing:</b> 125,116.85 m <b>Easting:</b> 367,412.41 m							
<b>Position Uncertainty</b>	0.0 ft		<b>Latitude:</b> 48° 4' 58.500 N <b>Longitude:</b> 103° 37' 22.076 W							
			<b>Wellhead Elevation:</b> Ground Level: 2,084.0 ft							
<b>Wellbore</b>	Yukon 5301 41-12T									
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b> (°)	<b>Dip Angle</b> (°)	<b>Field Strength</b> (nT)					
	IGRF200510	3/12/2013	8.35	73.03	56,594					
<b>Design:</b>	Design #1									
<b>Audit Notes:</b>										
<b>Version:</b>		<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0					
<b>Vertical Section:</b>		<b>Depth From (TVD)</b> (ft)	<b>+N/-S</b> (ft)	<b>+E/-W</b> (ft)	<b>Direction</b> (°)					
		0.0	0.0	0.0	176.80					
<b>Plan Sections</b>										
<b>Measured</b>	<b>Vertical</b>									
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(%/100ft)	(%/100ft)	(%/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,334.7	0.00	0.00	10,334.7	0.0	0.0	0.00	0.00	0.00	0.00	
11,084.7	90.00	150.00	10,812.2	-413.5	238.7	12.00	12.00	0.00	150.00	
11,150.0	90.00	150.00	10,812.2	-470.0	271.4	0.00	0.00	0.00	0.00	
12,116.7	90.00	179.00	10,812.2	-1,391.6	527.0	3.00	0.00	3.00	90.00	
14,427.2	90.00	179.00	10,812.2	-3,701.8	567.3	0.00	0.00	0.00	0.00	
16,038.7	90.15	179.92	10,810.0	-5,313.2	582.5	0.06	0.01	0.06	80.53	
21,275.5	90.15	179.92	10,796.0	-10,550.0	589.9	0.00	0.00	0.00	0.00	BHL

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pierre</b>									
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,119.0	0.00	0.00	2,119.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>9 5/8"</b>									
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,629.0	0.00	0.00	4,629.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Greenhorn</b>									

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,020.0	0.00	0.00	5,020.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Mowry</b>									
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,447.0	0.00	0.00	5,447.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dakota</b>									
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,365.0	0.00	0.00	6,365.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Rierdon</b>									
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,885.0	0.00	0.00	6,885.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dunham Salt</b>									
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,961.0	0.00	0.00	6,961.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dunham Salt Base</b>									
6,966.0	0.00	0.00	6,966.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Spearfish</b>									
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,271.0	0.00	0.00	7,271.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pine Salt</b>									
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,326.0	0.00	0.00	7,326.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pine Salt Base</b>									
7,355.0	0.00	0.00	7,355.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Opeche Salt</b>									
7,395.0	0.00	0.00	7,395.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Opeche Salt Base</b>									
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,599.0	0.00	0.00	7,599.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Broom Creek (Top of Minnelusa Gp.)</b>									
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,657.0	0.00	0.00	7,657.0	0.0	0.0	0.0	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
<b>Amesden</b>										
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,845.0	0.00	0.00	7,845.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Tyler</b>										
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,018.0	0.00	0.00	8,018.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Otter (Base of Minnelusa Gp.)</b>										
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,369.0	0.00	0.00	8,369.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Kibbey</b>										
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,515.0	0.00	0.00	8,515.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Charles Salt</b>										
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,141.0	0.00	0.00	9,141.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>UB</b>										
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,217.0	0.00	0.00	9,217.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Base Last Salt</b>										
9,262.0	0.00	0.00	9,262.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Ratcliffe</b>										
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,437.0	0.00	0.00	9,437.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Mission Canyon</b>										
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Lodgepole</b>										
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,177.0	0.00	0.00	10,177.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Lodgepole Fracture Zone</b>										
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,334.7	0.00	0.00	10,334.7	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Start Build 12.00- KOP</b>										
10,350.0	1.84	150.00	10,350.0	-0.2	0.1	0.2	12.00	12.00	0.00	
10,375.0	4.84	150.00	10,375.0	-1.5	0.8	1.5	12.00	12.00	0.00	
10,400.0	7.84	150.00	10,399.8	-3.9	2.2	4.0	12.00	12.00	0.00	

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,425.0	10.84	150.00	10,424.5	-7.4	4.3	7.6	12.00	12.00	0.00	
10,450.0	13.84	150.00	10,448.9	-12.0	6.9	12.4	12.00	12.00	0.00	
10,475.0	16.84	150.00	10,473.0	-17.7	10.2	18.3	12.00	12.00	0.00	
10,500.0	19.84	150.00	10,496.7	-24.5	14.2	25.3	12.00	12.00	0.00	
10,525.0	22.84	150.00	10,520.0	-32.4	18.7	33.4	12.00	12.00	0.00	
10,550.0	25.84	150.00	10,542.8	-41.3	23.9	42.6	12.00	12.00	0.00	
10,575.0	28.84	150.00	10,565.0	-51.3	29.6	52.8	12.00	12.00	0.00	
10,600.0	31.84	150.00	10,586.6	-62.2	35.9	64.1	12.00	12.00	0.00	
10,625.0	34.84	150.00	10,607.4	-74.1	42.8	76.4	12.00	12.00	0.00	
10,650.0	37.84	150.00	10,627.6	-86.9	50.2	89.6	12.00	12.00	0.00	
10,675.0	40.84	150.00	10,646.9	-100.7	58.1	103.7	12.00	12.00	0.00	
10,699.0	43.72	150.00	10,664.7	-114.6	66.2	118.1	12.00	12.00	0.00	
<b>False Bakken</b>										
10,700.0	43.84	150.00	10,665.4	-115.2	66.5	118.8	12.00	12.00	0.00	
10,707.0	44.68	150.00	10,670.4	-119.5	69.0	123.1	12.00	12.00	0.00	
<b>Upper Bakken</b>										
10,717.0	45.88	150.00	10,677.4	-125.6	72.5	129.5	12.00	12.00	0.00	
<b>Middle Bakken</b>										
10,725.0	46.84	150.00	10,683.0	-130.6	75.4	134.6	12.00	12.00	0.00	
10,750.0	49.84	150.00	10,699.6	-146.8	84.8	151.3	12.00	12.00	0.00	
10,760.0	51.04	150.00	10,705.9	-153.5	88.6	158.2	12.00	12.00	0.00	
<b>Lower Bakken</b>										
10,772.0	52.48	150.00	10,713.4	-161.6	93.3	166.6	12.00	12.00	0.00	
<b>Pronghorn</b>										
10,775.0	52.84	150.00	10,715.2	-163.7	94.5	168.7	12.00	12.00	0.00	
10,789.0	54.52	150.00	10,723.5	-173.5	100.2	178.8	12.00	12.00	0.00	
<b>Three Forks</b>										
10,800.0	55.84	150.00	10,729.8	-181.3	104.7	186.9	12.00	12.00	0.00	
10,825.0	58.84	150.00	10,743.3	-199.5	115.2	205.6	12.00	12.00	0.00	
10,850.0	61.84	150.00	10,755.6	-218.3	126.1	225.0	12.00	12.00	0.00	
10,875.0	64.84	150.00	10,766.9	-237.7	137.2	245.0	12.00	12.00	0.00	
10,900.0	67.84	150.00	10,776.9	-257.5	148.7	265.4	12.00	12.00	0.00	
10,925.0	70.84	150.00	10,785.7	-277.8	160.4	286.3	12.00	12.00	0.00	
10,950.0	73.84	150.00	10,793.3	-298.4	172.3	307.5	12.00	12.00	0.00	
10,975.0	76.84	150.00	10,799.6	-319.3	184.4	329.1	12.00	12.00	0.00	
11,000.0	79.84	150.00	10,804.7	-340.5	196.6	351.0	12.00	12.00	0.00	
11,025.0	82.84	150.00	10,808.4	-361.9	209.0	373.0	12.00	12.00	0.00	
11,050.0	85.84	150.00	10,810.9	-383.5	221.4	395.2	12.00	12.00	0.00	
11,075.0	88.84	150.00	10,812.1	-405.1	233.9	417.5	12.00	12.00	0.00	
11,084.7	90.00	150.00	10,812.2	-413.5	238.7	426.2	12.00	12.00	0.00	
<b>Start 65.3 hold at 11084.7 MD- EOC</b>										
11,100.0	90.00	150.00	10,812.2	-426.7	246.4	439.8	0.00	0.00	0.00	
11,150.0	90.00	150.00	10,812.2	-470.0	271.4	484.5	0.00	0.00	0.00	
<b>Start DLS 3.00 TFO 90.00 - 7"</b>										
11,200.0	90.00	151.50	10,812.2	-513.7	295.8	529.4	3.00	0.00	3.00	
11,300.0	90.00	154.50	10,812.2	-602.8	341.2	620.9	3.00	0.00	3.00	
11,400.0	90.00	157.50	10,812.2	-694.1	381.9	714.3	3.00	0.00	3.00	
11,500.0	90.00	160.50	10,812.2	-787.5	417.7	809.5	3.00	0.00	3.00	
11,600.0	90.00	163.50	10,812.2	-882.5	448.6	906.2	3.00	0.00	3.00	
11,700.0	90.00	166.50	10,812.2	-979.1	474.5	1,004.1	3.00	0.00	3.00	
11,800.0	90.00	169.50	10,812.2	-1,076.9	495.3	1,102.9	3.00	0.00	3.00	
11,900.0	90.00	172.50	10,812.2	-1,175.7	510.9	1,202.4	3.00	0.00	3.00	
12,000.0	90.00	175.50	10,812.2	-1,275.1	521.4	1,302.2	3.00	0.00	3.00	

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)
12,100.0	90.00	178.50	10,812.2	-1,375.0	526.6	1,402.2	3.00	0.00	3.00
12,116.7	90.00	179.00	10,812.2	-1,391.6	527.0	1,418.9	3.00	0.00	3.00
<b>Start 2310.5 hold at 12116.7 MD</b>									
12,200.0	90.00	179.00	10,812.2	-1,475.0	528.4	1,502.2	0.00	0.00	0.00
12,300.0	90.00	179.00	10,812.2	-1,575.0	530.2	1,602.1	0.00	0.00	0.00
12,400.0	90.00	179.00	10,812.2	-1,674.9	531.9	1,702.0	0.00	0.00	0.00
12,500.0	90.00	179.00	10,812.2	-1,774.9	533.7	1,801.9	0.00	0.00	0.00
12,600.0	90.00	179.00	10,812.2	-1,874.9	535.4	1,901.9	0.00	0.00	0.00
12,700.0	90.00	179.00	10,812.2	-1,974.9	537.1	2,001.8	0.00	0.00	0.00
12,800.0	90.00	179.00	10,812.2	-2,074.9	538.9	2,101.7	0.00	0.00	0.00
12,900.0	90.00	179.00	10,812.2	-2,174.9	540.6	2,201.7	0.00	0.00	0.00
13,000.0	90.00	179.00	10,812.2	-2,274.8	542.4	2,301.6	0.00	0.00	0.00
13,100.0	90.00	179.00	10,812.2	-2,374.8	544.1	2,401.5	0.00	0.00	0.00
13,200.0	90.00	179.00	10,812.2	-2,474.8	545.9	2,501.4	0.00	0.00	0.00
13,300.0	90.00	179.00	10,812.2	-2,574.8	547.6	2,601.4	0.00	0.00	0.00
13,400.0	90.00	179.00	10,812.2	-2,674.8	549.4	2,701.3	0.00	0.00	0.00
13,500.0	90.00	179.00	10,812.2	-2,774.8	551.1	2,801.2	0.00	0.00	0.00
13,600.0	90.00	179.00	10,812.2	-2,874.8	552.9	2,901.1	0.00	0.00	0.00
13,700.0	90.00	179.00	10,812.2	-2,974.7	554.6	3,001.1	0.00	0.00	0.00
13,800.0	90.00	179.00	10,812.2	-3,074.7	556.3	3,101.0	0.00	0.00	0.00
13,900.0	90.00	179.00	10,812.2	-3,174.7	558.1	3,200.9	0.00	0.00	0.00
14,000.0	90.00	179.00	10,812.2	-3,274.7	559.8	3,300.8	0.00	0.00	0.00
14,100.0	90.00	179.00	10,812.2	-3,374.7	561.6	3,400.8	0.00	0.00	0.00
14,200.0	90.00	179.00	10,812.2	-3,474.7	563.3	3,500.7	0.00	0.00	0.00
14,300.0	90.00	179.00	10,812.2	-3,574.6	565.1	3,600.6	0.00	0.00	0.00
14,400.0	90.00	179.00	10,812.2	-3,674.6	566.8	3,700.5	0.00	0.00	0.00
14,427.2	90.00	179.00	10,812.2	-3,701.8	567.3	3,727.7	0.00	0.00	0.00
<b>Start DLS 0.06 TFO 80.53</b>									
14,500.0	90.01	179.04	10,812.2	-3,774.6	568.5	3,800.5	0.06	0.01	0.06
14,600.0	90.02	179.10	10,812.1	-3,874.6	570.2	3,900.4	0.06	0.01	0.06
14,700.0	90.03	179.16	10,812.1	-3,974.6	571.7	4,000.3	0.06	0.01	0.06
14,800.0	90.04	179.21	10,812.0	-4,074.6	573.1	4,100.2	0.06	0.01	0.06
14,900.0	90.04	179.27	10,812.0	-4,174.6	574.4	4,200.1	0.06	0.01	0.06
15,000.0	90.05	179.33	10,811.9	-4,274.6	575.7	4,300.0	0.06	0.01	0.06
15,100.0	90.06	179.38	10,811.8	-4,374.6	576.8	4,399.9	0.06	0.01	0.06
15,200.0	90.07	179.44	10,811.7	-4,474.6	577.8	4,499.8	0.06	0.01	0.06
15,300.0	90.08	179.50	10,811.5	-4,574.5	578.7	4,599.7	0.06	0.01	0.06
15,400.0	90.09	179.55	10,811.4	-4,674.5	579.6	4,699.6	0.06	0.01	0.06
15,500.0	90.10	179.61	10,811.2	-4,774.5	580.3	4,799.5	0.06	0.01	0.06
15,600.0	90.11	179.67	10,811.0	-4,874.5	580.9	4,899.4	0.06	0.01	0.06
15,700.0	90.12	179.73	10,810.8	-4,974.5	581.4	4,999.2	0.06	0.01	0.06
15,800.0	90.13	179.78	10,810.6	-5,074.5	581.9	5,099.1	0.06	0.01	0.06
15,900.0	90.14	179.84	10,810.4	-5,174.5	582.2	5,199.0	0.06	0.01	0.06
16,000.0	90.15	179.90	10,810.1	-5,274.5	582.4	5,298.8	0.06	0.01	0.06
16,038.7	90.15	179.92	10,810.0	-5,313.2	582.5	5,337.4	0.06	0.01	0.06
<b>Start 5236.8 hold at 16038.7 MD</b>									
16,100.0	90.15	179.92	10,809.8	-5,374.5	582.6	5,398.7	0.00	0.00	0.00
16,200.0	90.15	179.92	10,809.6	-5,474.5	582.7	5,498.5	0.00	0.00	0.00
16,300.0	90.15	179.92	10,809.3	-5,574.5	582.9	5,598.4	0.00	0.00	0.00
16,400.0	90.15	179.92	10,809.0	-5,674.5	583.0	5,698.2	0.00	0.00	0.00
16,500.0	90.15	179.92	10,808.8	-5,774.5	583.1	5,798.1	0.00	0.00	0.00
16,600.0	90.15	179.92	10,808.5	-5,874.5	583.3	5,897.9	0.00	0.00	0.00
16,700.0	90.15	179.92	10,808.2	-5,974.5	583.4	5,997.8	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)
16,800.0	90.15	179.92	10,808.0	-6,074.5	583.6	6,097.6	0.00	0.00	0.00
16,900.0	90.15	179.92	10,807.7	-6,174.5	583.7	6,197.5	0.00	0.00	0.00
17,000.0	90.15	179.92	10,807.4	-6,274.5	583.9	6,297.3	0.00	0.00	0.00
17,100.0	90.15	179.92	10,807.2	-6,374.5	584.0	6,397.2	0.00	0.00	0.00
17,200.0	90.15	179.92	10,806.9	-6,474.5	584.1	6,497.0	0.00	0.00	0.00
17,300.0	90.15	179.92	10,806.6	-6,574.5	584.3	6,596.9	0.00	0.00	0.00
17,400.0	90.15	179.92	10,806.4	-6,674.5	584.4	6,696.7	0.00	0.00	0.00
17,500.0	90.15	179.92	10,806.1	-6,774.5	584.6	6,796.6	0.00	0.00	0.00
17,600.0	90.15	179.92	10,805.8	-6,874.5	584.7	6,896.5	0.00	0.00	0.00
17,700.0	90.15	179.92	10,805.6	-6,974.5	584.8	6,996.3	0.00	0.00	0.00
17,800.0	90.15	179.92	10,805.3	-7,074.5	585.0	7,096.2	0.00	0.00	0.00
17,900.0	90.15	179.92	10,805.0	-7,174.5	585.1	7,196.0	0.00	0.00	0.00
18,000.0	90.15	179.92	10,804.8	-7,274.5	585.3	7,295.9	0.00	0.00	0.00
18,100.0	90.15	179.92	10,804.5	-7,374.5	585.4	7,395.7	0.00	0.00	0.00
18,200.0	90.15	179.92	10,804.2	-7,474.5	585.6	7,495.6	0.00	0.00	0.00
18,300.0	90.15	179.92	10,804.0	-7,574.5	585.7	7,595.4	0.00	0.00	0.00
18,400.0	90.15	179.92	10,803.7	-7,674.5	585.8	7,695.3	0.00	0.00	0.00
18,500.0	90.15	179.92	10,803.4	-7,774.5	586.0	7,795.1	0.00	0.00	0.00
18,600.0	90.15	179.92	10,803.2	-7,874.5	586.1	7,895.0	0.00	0.00	0.00
18,700.0	90.15	179.92	10,802.9	-7,974.5	586.3	7,994.8	0.00	0.00	0.00
18,800.0	90.15	179.92	10,802.6	-8,074.5	586.4	8,094.7	0.00	0.00	0.00
18,900.0	90.15	179.92	10,802.4	-8,174.5	586.5	8,194.5	0.00	0.00	0.00
19,000.0	90.15	179.92	10,802.1	-8,274.5	586.7	8,294.4	0.00	0.00	0.00
19,100.0	90.15	179.92	10,801.8	-8,374.5	586.8	8,394.2	0.00	0.00	0.00
19,200.0	90.15	179.92	10,801.6	-8,474.5	587.0	8,494.1	0.00	0.00	0.00
19,300.0	90.15	179.92	10,801.3	-8,574.5	587.1	8,593.9	0.00	0.00	0.00
19,400.0	90.15	179.92	10,801.0	-8,674.5	587.3	8,693.8	0.00	0.00	0.00
19,500.0	90.15	179.92	10,800.7	-8,774.5	587.4	8,793.6	0.00	0.00	0.00
19,600.0	90.15	179.92	10,800.5	-8,874.5	587.5	8,893.5	0.00	0.00	0.00
19,700.0	90.15	179.92	10,800.2	-8,974.5	587.7	8,993.3	0.00	0.00	0.00
19,800.0	90.15	179.92	10,799.9	-9,074.5	587.8	9,093.2	0.00	0.00	0.00
19,900.0	90.15	179.92	10,799.7	-9,174.5	588.0	9,193.0	0.00	0.00	0.00
20,000.0	90.15	179.92	10,799.4	-9,274.5	588.1	9,292.9	0.00	0.00	0.00
20,100.0	90.15	179.92	10,799.1	-9,374.5	588.3	9,392.7	0.00	0.00	0.00
20,200.0	90.15	179.92	10,798.9	-9,474.5	588.4	9,492.6	0.00	0.00	0.00
20,300.0	90.15	179.92	10,798.6	-9,574.5	588.5	9,592.4	0.00	0.00	0.00
20,400.0	90.15	179.92	10,798.3	-9,674.5	588.7	9,692.3	0.00	0.00	0.00
20,500.0	90.15	179.92	10,798.1	-9,774.5	588.8	9,792.1	0.00	0.00	0.00
20,600.0	90.15	179.92	10,797.8	-9,874.5	589.0	9,892.0	0.00	0.00	0.00
20,700.0	90.15	179.92	10,797.5	-9,974.5	589.1	9,991.8	0.00	0.00	0.00
20,800.0	90.15	179.92	10,797.3	-10,074.5	589.2	10,091.7	0.00	0.00	0.00
20,900.0	90.15	179.92	10,797.0	-10,174.5	589.4	10,191.6	0.00	0.00	0.00
21,000.0	90.15	179.92	10,796.7	-10,274.5	589.5	10,291.4	0.00	0.00	0.00
21,100.0	90.15	179.92	10,796.5	-10,374.5	589.7	10,391.3	0.00	0.00	0.00
21,200.0	90.15	179.92	10,796.2	-10,474.5	589.8	10,491.1	0.00	0.00	0.00
21,275.5	90.15	179.92	10,796.0	-10,550.0	589.9	10,566.5	0.00	0.00	0.00

**TD at 21275.5 - BHL**

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T						
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)						
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)						
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True						
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature						
<b>Wellbore:</b>	Yukon 5301 41-12T								
<b>Design:</b>	Design #1								
<b>Design Targets</b>									
<b>Target Name</b>									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
BHL - plan hits target center - Point	0.00	0.00	10,796.0	-10,550.0	589.9	121,896.56	367,461.69	48° 3' 14.382 N	103° 37' 13.392 W
<b>Casing Points</b>									
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>					<b>Name</b>	<b>Casing Diameter (in)</b>	<b>Hole Diameter (in)</b>	
2,119.0	2,119.0	9 5/8"					9.625	13.500	
11,150.0	10,812.2	7"					7.000	8.750	
<b>Formations</b>									
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>			<b>Name</b>	<b>Lithology</b>	<b>Dip (°)</b>	<b>Dip Direction (°)</b>		
1,919.0	1,919.0	Pierre							
4,629.0	4,629.0	Greenhorn							
5,020.0	5,020.0	Mowry							
5,447.0	5,447.0	Dakota							
6,365.0	6,365.0	Rierdon							
6,885.0	6,885.0	Dunham Salt							
6,961.0	6,961.0	Dunham Salt Base							
6,966.0	6,966.0	Spearfish							
7,271.0	7,271.0	Pine Salt							
7,326.0	7,326.0	Pine Salt Base							
7,355.0	7,355.0	Opecche Salt							
7,395.0	7,395.0	Opecche Salt Base							
7,599.0	7,599.0	Broom Creek (Top of Minnelusa Gp.)							
7,657.0	7,657.0	Amsden							
7,845.0	7,845.0	Tyler							
8,018.0	8,018.0	Otter (Base of Minnelusa Gp.)							
8,369.0	8,369.0	Kibbey							
8,515.0	8,515.0	Charles Salt							
9,141.0	9,141.0	UB							
9,217.0	9,217.0	Base Last Salt							
9,262.0	9,262.0	Ratcliffe							
9,437.0	9,437.0	Mission Canyon							
10,000.0	10,000.0	Lodgepole							
10,177.0	10,177.0	Lodgepole Fracture Zone							
10,699.0	10,684.7	False Bakken							
10,707.0	10,670.4	Upper Bakken							
10,717.0	10,677.4	Middle Bakken							
10,760.0	10,705.9	Lower Bakken							
10,772.0	10,713.4	Pronghorn							
10,789.0	10,723.5	Three Forks							

## Planning Report

<b>Database:</b>	OpenWellsCompass - EDM Prod	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>North Reference:</b>	True
<b>Well:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Yukon 5301 41-12T		
<b>Design:</b>	Design #1		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N-S (ft)	+E-W (ft)		
10,334.7	10,334.7	0.0	0.0	Start Build 12.00- KOP	
11,084.7	10,812.2	-413.5	238.7	Start 65.3 hold at 11084.7 MD- EOC	
11,150.0	10,812.2	-470.0	271.4	Start DLS 3.00 TFO 90.00	
12,116.7	10,812.2	-1,391.6	527.0	Start 2310.5 hold at 12116.7 MD	
14,427.2	10,812.2	-3,701.8	567.3	Start DLS 0.06 TFO 80.53	
16,038.7	10,810.0	-5,313.2	582.5	Start 5236.8 hold at 16038.7 MD	
21,275.5	10,796.0	-10,550.0	589.9	TD at 21275.5	

DRILLING PLAN							
<b>OPERATOR</b>	Oasis Petroleum		<b>COUNTY/STATE</b>	McKenzie Co., ND			
<b>WELL NAME</b>	YUKON 5301 41-12T		<b>RIG</b>	Nabors B25			
<b>WELL TYPE</b>	Horizontal Three Forks						
<b>LOCATION</b>	SWSW 12-153N-101W		<b>Surface Location (survey plat)</b>	280' ft	710' ft		
<b>EST. T.D.</b>	21,275'						
<b>TOTAL LATERAL:</b>	10,125' (est)		<b>GROUND ELEV:</b>	2084	Finished Pad Elev.		
<b>PROGNOSIS:</b>	Based on 2,119' KB (est)		<b>KB ELEV:</b>	2119	<b>Sub Height:</b> 25		
<b>MARKER</b>	<b>DEPTH (Surf Loc)</b>	<b>DATUM (Surf Loc)</b>	<b>LOGS:</b>	<b>Type</b> <b>Interval</b>			
Pierre	NDIC MAP	2,019	OH Logs: Triple Combo KOP to Kirby (or min run of 1800' whichever is greater); GR/Res to BSC; GR to surf; CND through the Dakota				
Greenhorn		4,629	CBL/GR: Above top of cement/GR to base of casing				
Mowry		5,020	MWD GR; KOP to lateral TD				
Dakota		5,447					
Rierdon		6,365					
Dunham Salt		6,885					
Dunham Salt Base		6,961					
Spearfish		6,966					
Pine Salt		7,271					
Pine Salt Base		7,326					
Opeche Salt		7,355					
Opeche Salt Base		7,395					
Broom Creek (Top of Minnelusa Gp.)		7,599					
Arnsden		7,657					
Tyler		7,845					
Otter (Base of Minnelusa Gp.)		8,018					
Kibbey		8,369					
Charles Salt		8,515					
UB		9,141					
<b>Base Last Salt</b>		9,217					
Ratcliffe		9,262					
Mission Canyon		9,437					
Lodgepole		10,000					
Lodgepole Fracture Zone		10,177					
False Bakken		10,699					
Upper Bakken		10,707					
Middle Bakken		10,717					
Lower Bakken		10,760					
Pronghorn		10,772					
<b>Three Forks</b>		10,789					
<b>Three Forks Target Top</b>		10,797					
<b>Three Forks Target Base</b>		10,813					
Claystone		10,817					
Dip Rate:	Overall +0.06° or 10' /100' up (complete)						
<b>Max. Anticipated BHP:</b>	4879						
<b>MUD:</b>	<b>Interval</b>	<b>Type</b>	<b>WT</b>	<b>Vis</b>	<b>WL</b>	<b>Remarks</b>	
Surface:	0' -	2,119' FW/Gel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,119' -	11,150' Invert	9.5-10.4	40-50	30+HHp	Circ Mud Tanks	
Lateral:	11,150' -	21,275' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks	
<b>CASING:</b>	<b>Size</b>	<b>Wt ppf</b>	<b>Hole</b>	<b>Depth</b>	<b>Cement</b>	<b>WOC</b>	<b>Remarks</b>
Surface:	9-5/8"	36#	13-1/2"	2,119'	To Surface	12	100' into Pierre
Intermediate:	7"	32#	8-3/4"	11,150'	3,947'	24	1500' above Dakota
Production Liner:	4.5"	13 1/2	6"	21,275'	TOL @ 10,285'		50' above KOP
<b>PROBABLE PLUGS, IF REQ'D:</b>							
<b>OTHER:</b>	<b>MD</b>	<b>TD</b>	<b>FNL/FSL</b>	<b>FEL/FWL</b>	<b>S-T-R</b>	<b>AZI</b>	
Surface:	2,119	2,119	259' FSL	710' FWL	Sec. 12 T153N-R101W		Survey Company:
KOP:	10,335'	10,335'	255' FSL	710' FWL	Sec. 12 T153N-R101W		Build Rate: 12 deg /100'
EOC:	11,085'	10,812'	159' FNL	948' FWL	Sec. 13 T153N-R101W	150.0	
Casing Point:	11,150'	10,812'	215' FNL	981' FWL	Sec. 13 T153N-R101W	150.0	
Middle Bakken Lateral TD:	21,275'	10,796'	250' FSL	1300' FWL	Sec. 24 T153N-R101W	179.9	
<b>Comments:</b>							
DRILL TO KOP							
DRILL CURVE TO 90 DEG AND 7" CASING POINT							
SET 7" CASING. DRILL THREE FORKS LATERAL							
MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral.							
MWD GR to be run from KOP to Lateral TD.							
<b>OASIS</b> PETROLEUM							
Geology: 1/0/1900	Engineering: M. Brown 6-4-2013						

**SECTION BREAKDOWN**  
OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

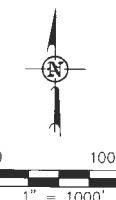
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
SECTIONS 12, 13 & 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

THIS DOCUMENT WAS ORIGINALLY  
ISSUED AND SEALED BY DARYL D.  
KASEMAN, PLS, REGISTRATION NUMBER  
3880 ON 6/05/13 AND THE ORIGINAL  
DOCUMENTS ARE STORED AT THE  
OFFICES OF INTERSTATE ENGINEERING,  
INC.



ALL AZIMUTHS ARE BASED ON G.P.S.  
OBSERVATIONS. THE ORIGINAL SURVEY OF THIS  
AREA FOR THE GENERAL LAND OFFICE (G.L.O.)  
WAS 1900. THE CORNERS FOUND ARE AS  
INDICATED AND ALL OTHERS ARE COMPUTED FROM  
THOSE CORNERS FOUND AND BASED ON G.L.O.  
DATA. THE MAPPING ANGLE FOR THIS AREA IS  
APPROXIMATELY -0°0'3".



MONUMENT — RECOVERED  
MONUMENT — NOT RECOVERED



© 2011, INTERSTATE ENGINEERING, INC.

**2/8**



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph: (406) 433-5617  
Fax: (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Montana, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
SECTION BREAKDOWN  
SECTIONS 12, 13 & 24, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Revisor No.	Date	By	Description
REV 1	12/6/11	JJS	Moved bottom hole
REV 2	12/12/11	JJS	Changed to double pad
REV 3	2/3/13	RHM	Moved bottom hole / changed name
REV 4	5/06/13	JJS	Moved well 60' east

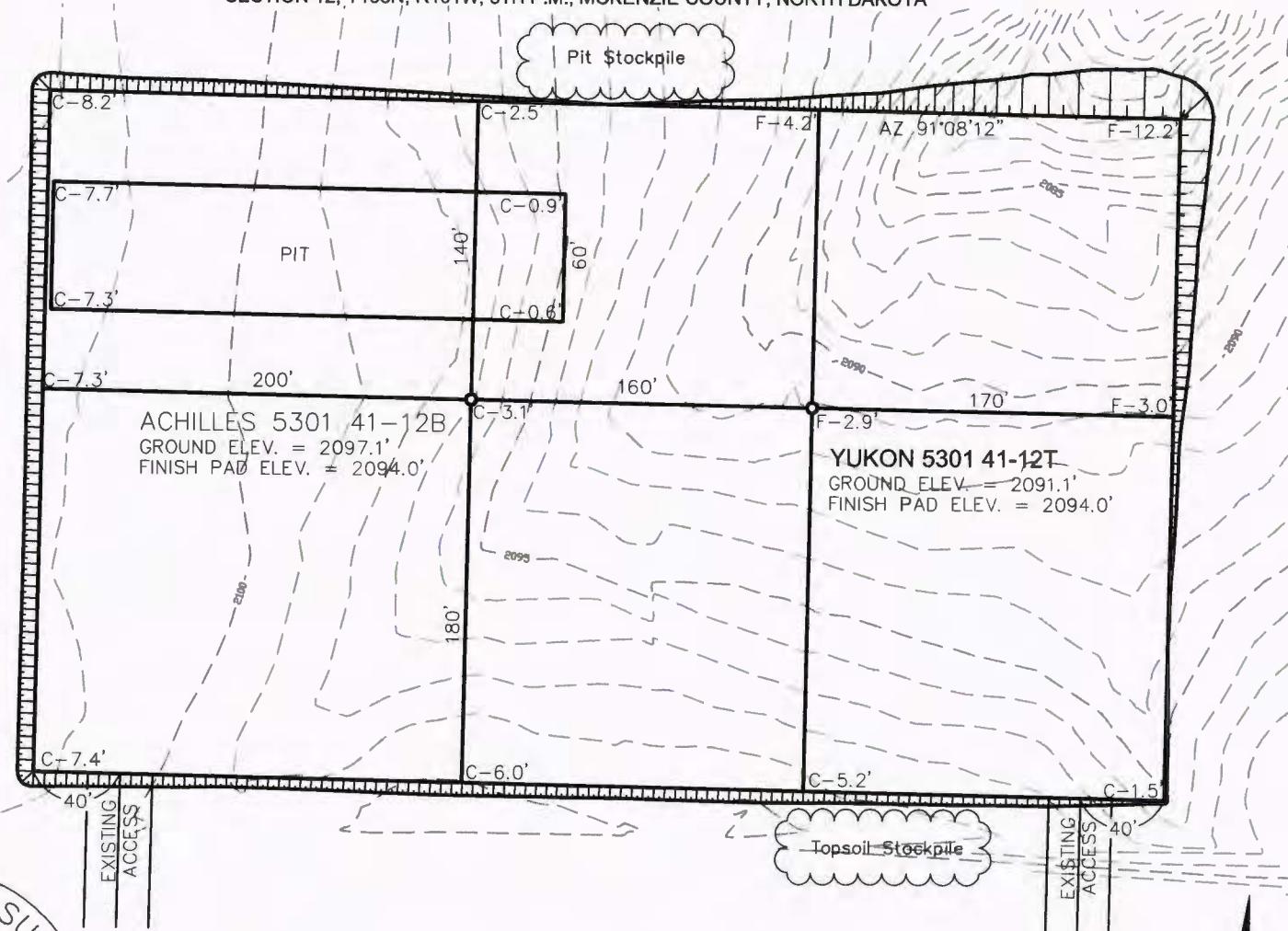
Project No.: S11-09-339  
Drawn By: JJS  
Checked By: DDK  
Date: NOV 2011  
Other offices in Montana, North Dakota and South Dakota  
INTERSTATE ENGINEERING, INC. 425 E. Main Street, Sidney, MT 59270 • (406) 433-5617 & 5618 • FAX: (406) 433-5618  
E-mail: [sidney@interstateeng.com](mailto:sidney@interstateeng.com) • [www.interstateeng.com](http://www.interstateeng.com) • © 2011 Interstate Engineering, Inc. All rights reserved.

# PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

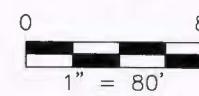
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



THIS DOCUMENT WAS ORIGINALLY  
ISSUED AND SEALED BY DARYL D.  
KASEMAN, PLS, REGISTRATION NUMBER  
3880 ON 6/05/13 AND THE ORIGINAL  
DOCUMENTS ARE STORED AT THE  
OFFICES OF INTERSTATE ENGINEERING,  
INC.

NOTE: All utilities shown are preliminary only, a complete  
utilities location is recommended before construction.



© 2011, INTERSTATE ENGINEERING, INC.



SHEET NO.

3/8

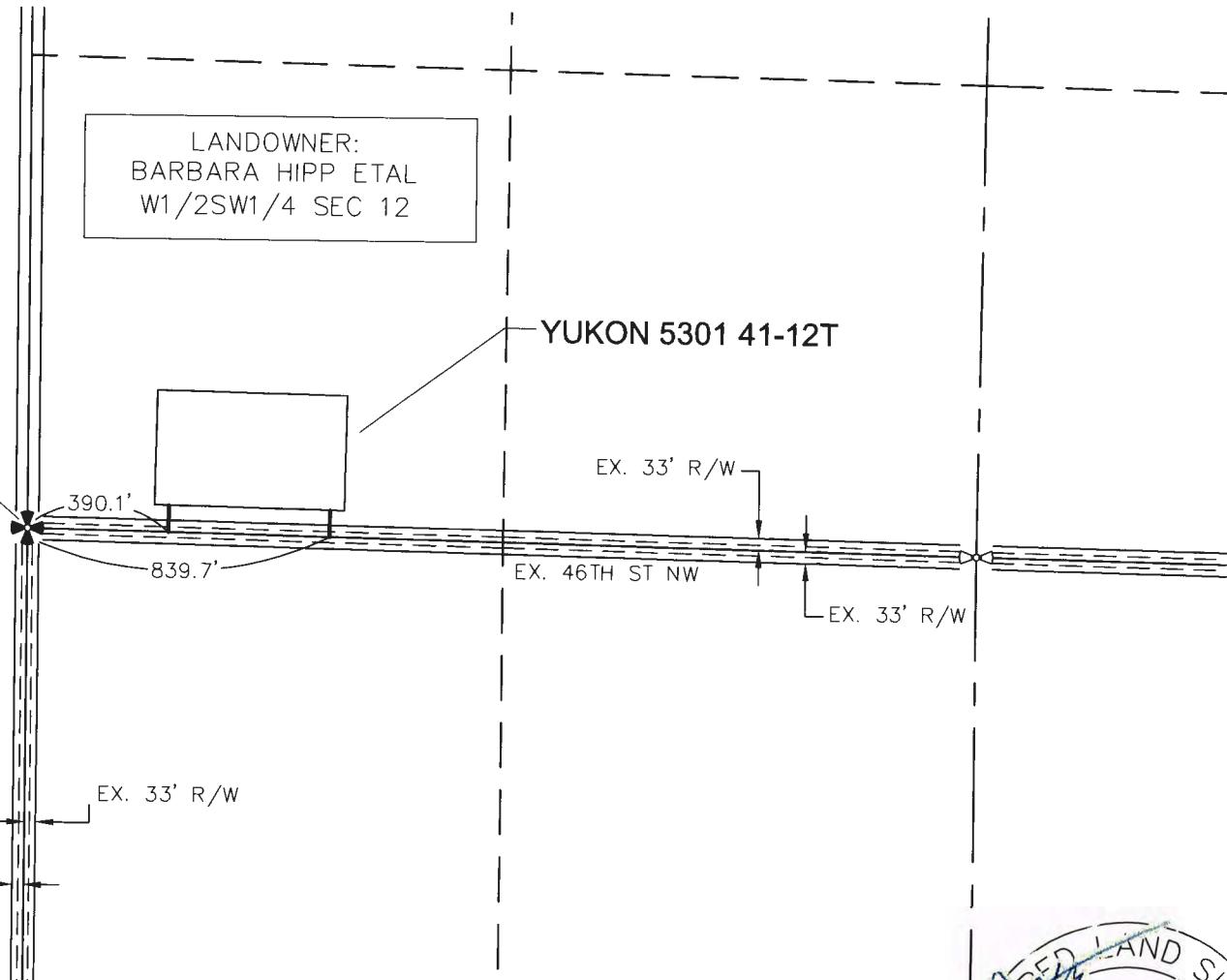
Interstate Engineering, Inc.  
P.O. Box 648  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax. (406) 433-5613  
[www.interstateberg.com](http://www.interstateberg.com)  
Other offices in Montana, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC		Revision No.	Date	By	Description
PAD LAYOUT		REV. 1	12/6/11	US	Moved bottom hole
SECTION 12, T153N, R101W		REV. 2	12/7/11	US	Changed to double pad
MCKENZIE COUNTY, NORTH DAKOTA		REV. 3	2/5/12	BH	Moved bottom hole / changed name
		REV. 4	5/6/12	US	Moved well, 60' East
					Drawn By: <u>J.S.</u> Project No.: <u>S11-9-339</u> Checked By: <u>D.D.K.</u> Date: <u>NOV. 2011</u>

# ACCESS APPROACH

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002  
"YUKON 5301 41-12T"

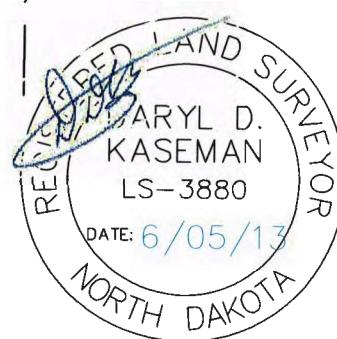
255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



THIS DOCUMENT WAS ORIGINALLY ISSUED AND  
SEALED BY DARYL D. KASEMAN, PLS, REGISTRATION  
NUMBER 3880 ON 6/05/13 AND THE ORIGINAL  
DOCUMENTS ARE STORED AT THE OFFICES OF  
INTERSTATE ENGINEERING, INC.

0  
500  
1" = 500'

NOTE: All utilities shown are preliminary only, a complete  
utilities location is recommended before construction.



© 2011, INTERSTATE ENGINEERING, INC.



Professionals you need, credible you trust.

4/8

SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 548  
425 East Main Street  
Sidney, Montana 59270  
Ph: (406) 433-5617  
Fax: (406) 433-5618  
[www.interstateengineering.com](http://www.interstateengineering.com)  
Other offices in Missoula, North Dakota and Sioux City, Iowa

OASIS PETROLEUM NORTH AMERICA, LLC		Revision No.
ACCESS APPROACH		REV 1
SECTION 12, T153N, R101W		12/06/11
MCKENZIE COUNTY, NORTH DAKOTA		US
Drawn By:	J.J.S.	MOVED BOTTOM HOLE
Project No.: S1-149-339		REV 2
		7/13/11
		CHANGED TO DOUBLE RAD
		REV 3
		8/9/13
		MOVED BOTTOM HOLE / CHANGED NAME
		REV 4
		5/08/13
		MOVED WELL SG EAST
		NOV. 2011
Checked By:	D.D.K.	Date:



© 2011, INTERSTATE ENGINEERING, INC.

**5/8**



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph: (406) 433-5617  
Fax (406) 433-5618  
[www.Interstateeng.com](http://www.Interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
QUAD LOCATION MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-09-339  
Checked By: D.D.K. Date: NOV 2011

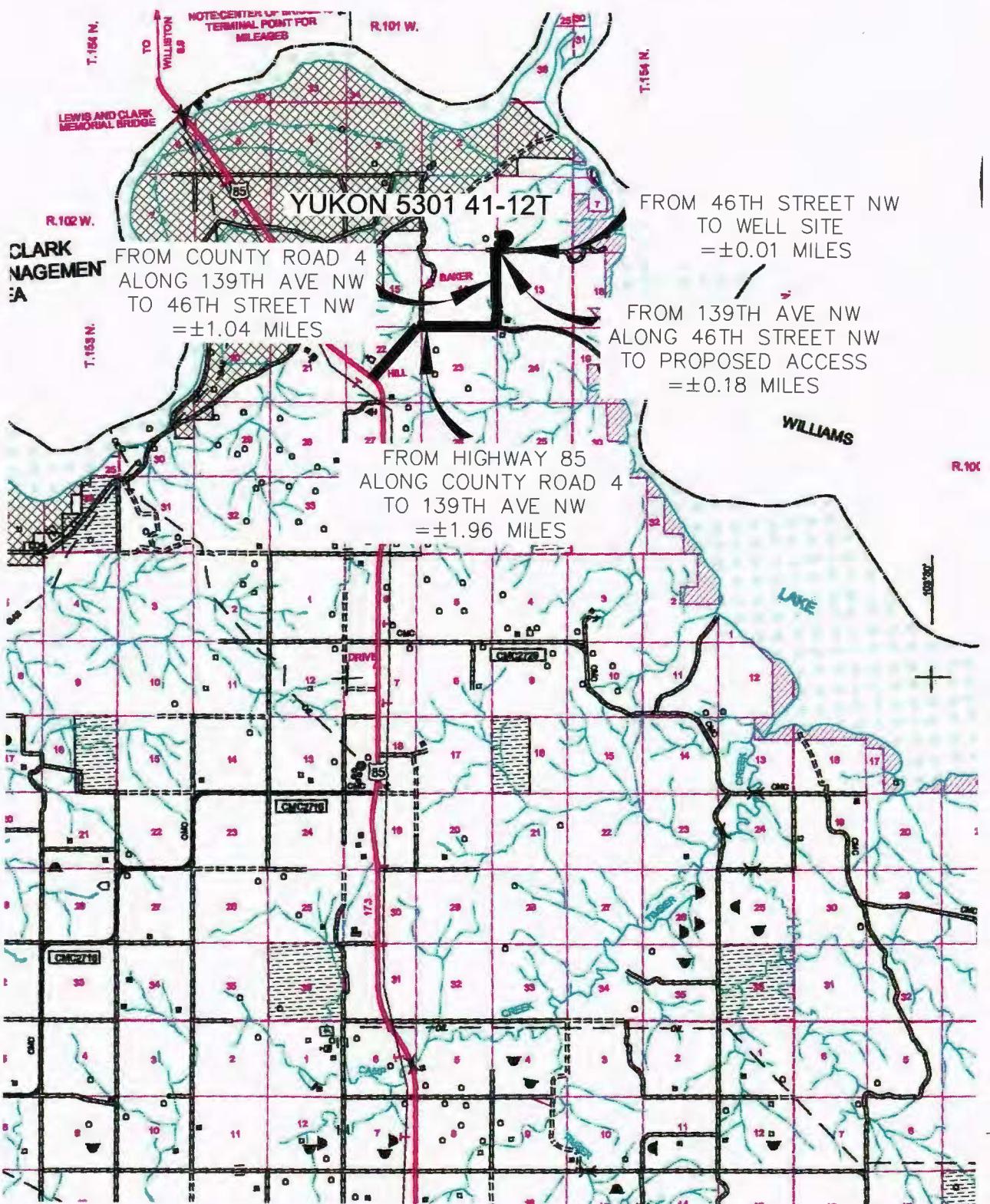
Revision No.	Date	By	Description
REV 1	12/6/11	JJS	MOVED BOTTOM HOLE
REV 2	12/13/11	JJS	CHANGED TO DOUBLE PAD
REV 3	2/5/13	BHK	MOVED BOTTOM HOLE / CHANGED NAME
REV 4	5/6/13	JJS	MOVED WELL 60' EAST

### COUNTY ROAD MAP

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"YUKON 5301 41-12T"

TURON 338141-121  
255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



© 2011, INTERSTATE ENGINEERING, INC.

SCALE: 1" = 2 MILE

6/8  
SHEET NO.



**INTERSTATE**  
ENGINEERING

SHEET NO.

*Professionals you need, people you trust.*

**Interstate Engineering, Inc.**  
P.O. Box 648  
**425 East Main Street**  
**Sidney, Montana 59270**  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
or offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
COUNTY ROAD MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

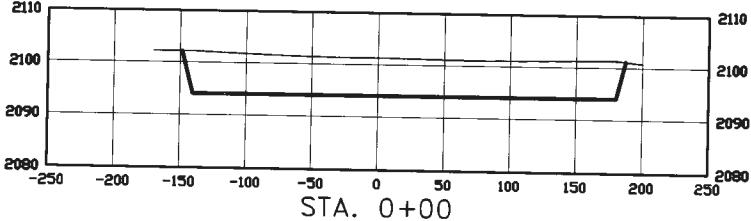
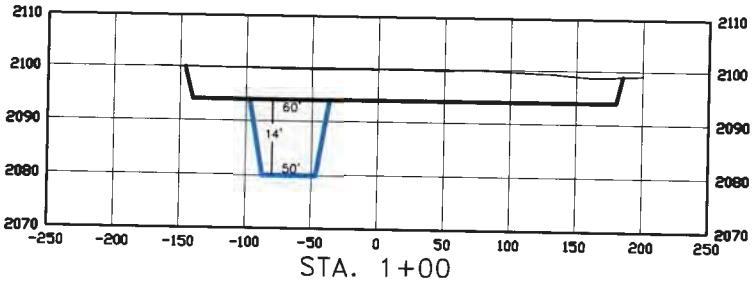
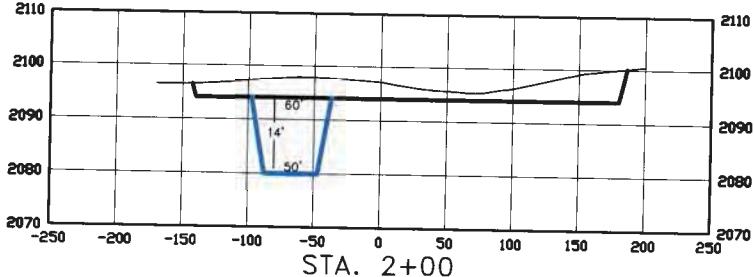
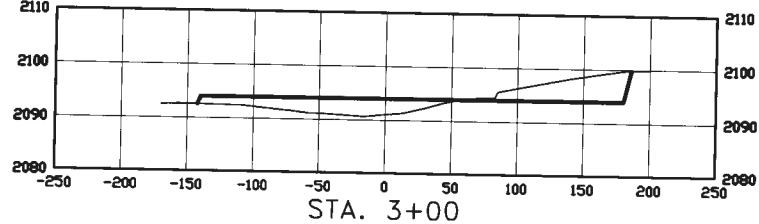
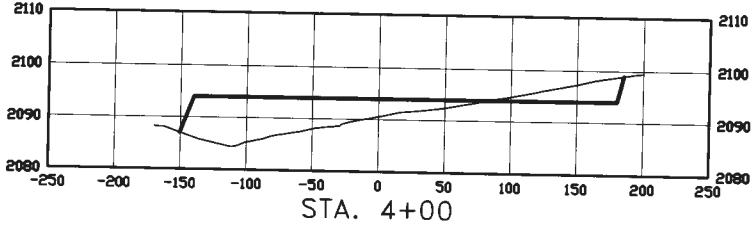
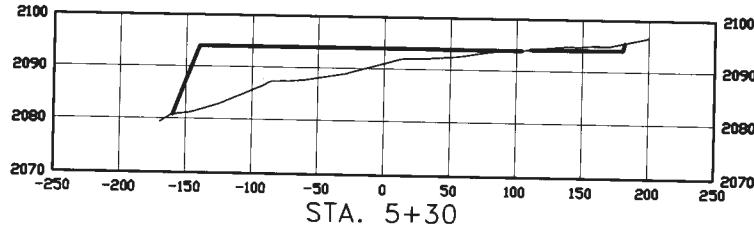
Revision No.	Date	By	Description
REV 1	12/6/11	JJS	MOVED BOTTOM HOLE
REV 2	12/13/11	JJS	CHANGED TO DOUBLE PAD
REV 3	2/5/13	BHH	MOVED BOTTOM HOLE / CHANGED NAME
REV 4	5/06/13	JJS	MOVED WELL 60' EAST

# CROSS SECTIONS

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



## SCALE

HORIZ 1"=140'  
VERT 1"=35'

© 2011, INTERSTATE ENGINEERING, INC.

7/8

SHEET NO.



Professionals you need, people you trust

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph: (406) 433-5617  
Fax: (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Nebraska, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC

PAD CROSS SECTIONS

SECTION 12, T153N, R101W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-9-339

Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JJS	MOVED BOTTOM HOLE
REV 2	12/13/11	JJS	CHANGED TO DOUBLE PAD
REV 3	2/5/13	BHH	MOVED BOTTOM HOLE / CHANGED NAME
REV 4	5/08/13	JJS	MOVED WELL 60' EAST

**WELL LOCATION SITE QUANTITIES**  
 OASIS PETROLEUM NORTH AMERICA, LLC  
 1001 FANNIN, SUITE 1500, HOUSTON, TX 77002  
 "YUKON 5301 41-12T"  
 255 FEET FROM SOUTH LINE AND 710 FEET FROM WEST LINE  
 SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

WELL SITE ELEVATION	2091.1
WELL PAD ELEVATION	2094.0
EXCAVATION	17,665
PLUS PIT	<u>3,150</u>
	20,815
EMBANKMENT	9,610
PLUS SHRINKAGE (30%)	<u>2,883</u>
	12,493
STOCKPILE PIT	3,150
STOCKPILE TOP SOIL (6")	3,350
STOCKPILE FROM PAD	1,822
DISTURBED AREA FROM PAD	4.15 ACRES

NOTE: ALL QUANTITIES ARE IN CUBIC YARDS (UNLESS NOTED)  
 CUT END SLOPES AT 1:1  
 FILL END SLOPES AT 1.5:1

**WELL SITE LOCATION**

710' FWL

255' FSL

© 2011, INTERSTATE ENGINEERING, INC.

8/8



SHEET NO.

Interstate Engineering, Inc.  
 P.O. Box 648  
 425 East Main Street  
 Sidney, Montana 59270  
 Ph: (406) 433-5617  
 Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
 QUANTITIES  
 SECTION 12, T153N, R101W  
 MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No: S11-09-339  
 Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JJS	Moved bottom hole
REV 2	12/13/11	JJS	Changed to double pad
REV 3	2/3/13	BHH	Moved bottom hole / changed name
REV 4	2/06/13	JJS	Moved well 80' east



# SUNDRY NOTICES AND REPORTS ON WELLS - FORM 4

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.

22099



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>Immediately</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.		<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
Approximate Start Date		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input checked="" type="checkbox"/> Reclamation
		<input type="checkbox"/> Other	<b>Reinstate APD permit</b>

Well Name and Number  
**Daphne 5301 41-12B**

Footages	Qtr-Qtr	Section	Township	Range
255 F S L	650 F W L	SWSW	12	153 N 101 W
Field <b>Baker</b>	Pool <b>Bakken</b>	County <b>McKenzie</b>		

## 24-HOUR PRODUCTION RATE

Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code
---------	------	-------	----------

## DETAILS OF WORK

Oasis Petroleum North America LLC respectfully request that the permit issued for the above referenced well be reinstated.

Please apply charges to credit card on file.

\$100 APD renewal cc

Inv 37681 Lt 05/30/2013

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9563</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Heather McCowan</b>	
Title <b>Regulatory Assistant</b>	Date <b>May 9, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

## FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>5-29-13</b>	
By 	
Title <b>Petroleum Resource Specialist</b>	



# SUNDRY NOTICES AND REPORTS ON WELLS - FORM 4

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)



Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

Notice of Intent

Approximate Start Date  
**May 9, 2013**

Report of Work Done

Date Work Completed

Notice of Intent to Begin a Workover Project that may Qualify  
for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.

Approximate Start Date

Drilling Prognosis

Spill Report

Redrilling or Repair

Shooting

Casing or Liner

Acidizing

Plug Well

Fracture Treatment

Supplemental History

Change Production Method

Temporarily Abandon

Reclamation

Other

Revise well plan and well name

## Well Name and Number

**Daphne 5301 41-12B**

## Footages

255 F	S	L	650 F	W	L	Qtr-Qtr	Section	Township	Range
						<b>SWSW</b>	<b>12</b>	<b>153 N</b>	<b>101 W</b>

## Field

**Baker**

Pool

**Bakken**

County

**McKenzie**

## 24-HOUR PRODUCTION RATE

Before	After	Oil	Oil
Water	Water	Bbls	Bbls
Gas	Gas	MCF	MCF

Name of Contractor(s)

Address

City

State

Zip Code

## DETAILS OF WORK

Oasis Petroleum respectfully requests to make the following changes to the well plan for the subject well:

Intermediate casing point changed to: 215' FNL & 921'FWL Sec. 13 T153N 101W

Casing point depth changed to: 11150' MD/ 10812' TVD

Bottom hole changed to: 250'FSL & 1300'FWL Sec. 24 T153N R101W

Total depth changed to: 21276' MD/ 10796' TVD

Well name changed to: Yukon 5301 41-12T

*Splicing unit changed to  
sections 13 & 24*

Attached are revised plats, drill plan, directional plan and plot.

The following statements remain true:

Notice has been provided to the owner of any permanently occupied dwelling within 1320 feet

This well is not located within 500 feet of an occupied dwelling

*#25 WNC CC*

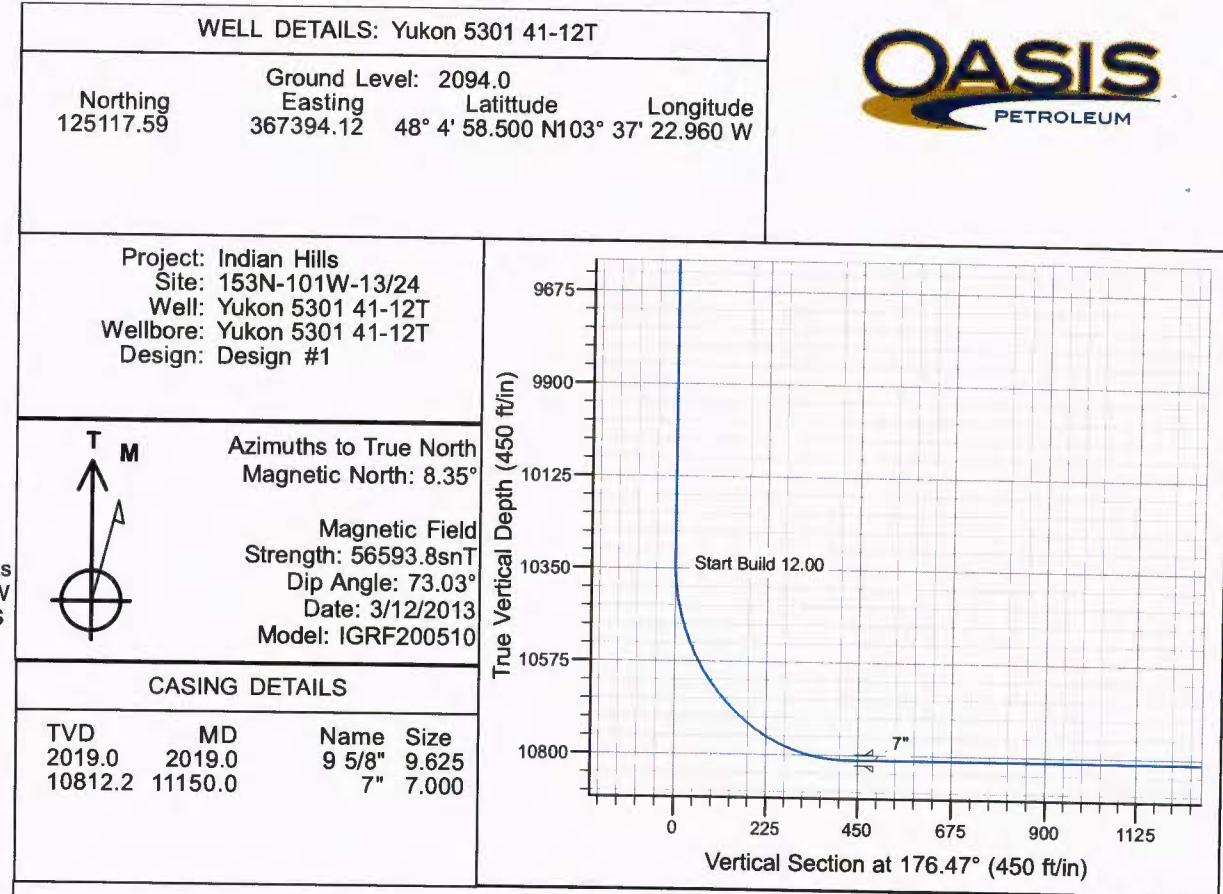
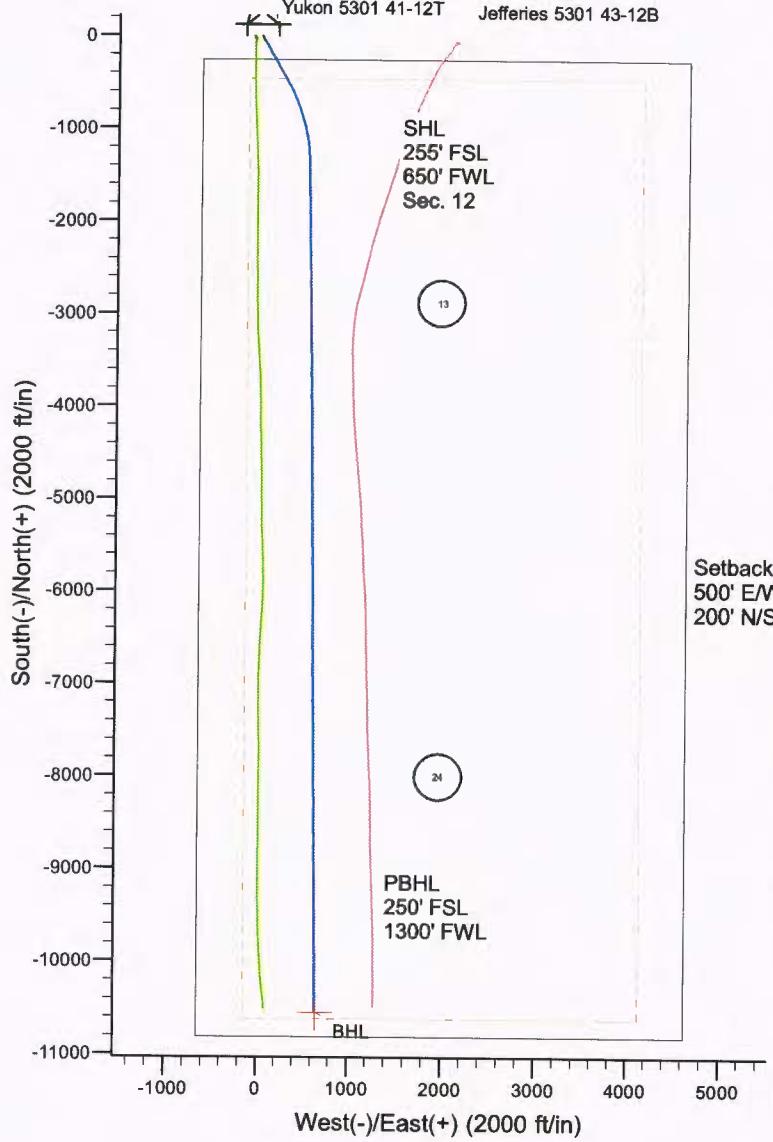
*Inv 37681 L+OSB02013*

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9563</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature <i>Heather McCowan</i>	Printed Name <b>Heather McCowan</b>	
Title <b>Regulatory Assistant</b>	Date <b>May 9, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

## FOR STATE USE ONLY

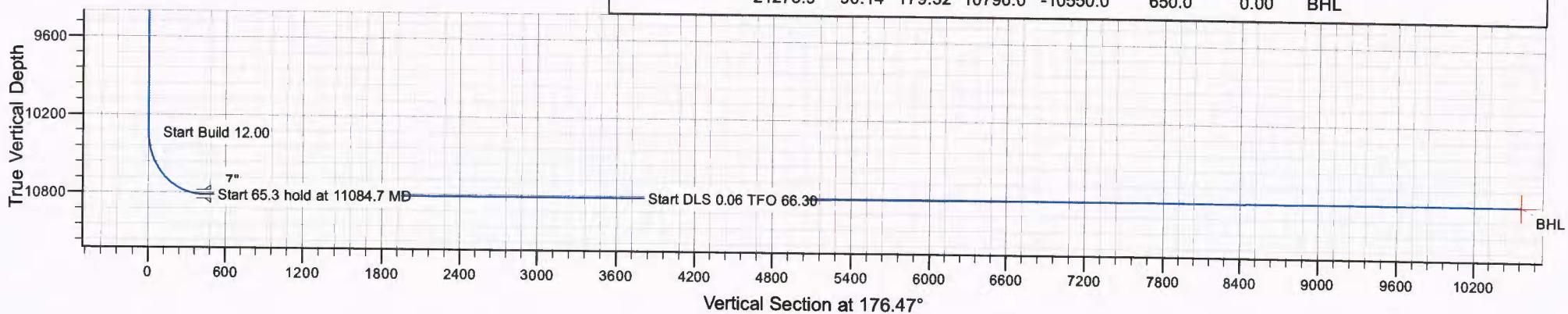
<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>5-29-13</b>	
By <i>Pathanah Embek</i>	
Title <b>Petroleum Resource Specialist</b>	

DRILLING PLAN							
<b>OPERATOR</b>	Oasis Petroleum			<b>COUNTY/STATE</b>	McKenzie Co., ND		
<b>WELL NAME</b>	YUKON 53N 41-107			<b>RIG</b>	Nabors B25		
<b>WELL TYPE</b>	Horizontal Three-Point			<b>Surface Location (Survey Plat)</b>	350' NW 850' NW		
<b>LOCATION</b>	SWSW 12-153N-101W			<b>GROUND ELEV:</b>	2094' Finished Pad Elev.		
<b>EST. T.D.</b>	21,278'			<b>KB ELEV:</b>	2112'		
<b>TOTAL LATERAL:</b>	10,126' (est)			<b>Sub Height:</b>			
<b>PROGNOSIS:</b>	Based on 2,112' KB (est.)			<b>LOGS:</b>			
<b>MARKER</b>	<b>DEPTH (Surf Loc)</b>	<b>DATUM (Surf Loc)</b>		<b>Type</b>	<b>Interval</b>		
Pierre	NDIC MAP	1,919	200'	OH Logs: Triple Combo KOP to Kirby (or min run of 1800' whichever is greater); GR/Res to BSC; GR to surf; CND through the Dakota			
Greenhorn		4,629	-2,510'	CBL/GR: Above top of cement/GR to base of casing			
Mowry		5,020	-2,901'	MWD GR: KOP to lateral TD			
Dakota		5,447	-3,328'				
Rierdon		6,385	-4,246'				
Dunham Salt		6,885	-4,766'	Surf:	3 deg. max., 1 deg / 100'; surv every 500'		
Dunham Salt Base		6,981	-4,842'	Prod:	5 deg. max., 1 deg / 100'; surv every 100'		
Spearfish		6,986	-4,847'				
Pine Salt		7,271	-5,152'				
Pine Salt Base		7,328	-5,207'				
Opeche Salt		7,355	-5,236'				
Opeche Salt Base		7,395	-5,276'				
Broom Creek (Top of Minnelusa Gp.)		7,598	-5,480'				
Amsden		7,657	-5,538'				
Tyler		7,845	-5,726'				
Otter (Base of Minnelusa Gp.)		8,018	-5,899'				
Kibbey		8,369	-6,250'				
Charles Salt		8,515	-6,396'				
UB		9,141	-7,022'				
Base Last Salt		9,217	-7,098'				
Ratcliffe		9,262	-7,143'				
Mission Canyon		9,437	-7,318'				
Lodgepole		10,000	-7,881'				
Lodgepole Fracture Zone		10,177	-8,058'				
False Bakken		10,699	-8,580'				
Upper Bakken		10,707	-8,588'				
Middle Bakken		10,717	-8,598'				
Lower Bakken		10,760	-8,641'				
Pronghorn		10,772	-8,653'				
Three Forks		10,789	-8,670'				
Three Forks Target Top		10,797	-8,678'				
Three Forks Target Base		10,813	-8,694'				
Claystone		10,817	-8,698'				
Dip Rate:	overall +0.05° or +0° /100' up (complex)						
<b>Max. Anticipated BHP:</b>	4679			<b>Surface Formation:</b> Glacial till			
<b>MUD:</b>	<b>Interval</b>	<b>Type</b>	<b>WT</b>	<b>Vis</b>	<b>WL</b>	<b>Remarks</b>	
Surface:	0' -	2,019' FW/Gel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,019' -	11,150' Invert	9.5-10.4	40-50	30+HHP	Circ Mud Tanks	
Lateral:	11,150' -	21,278' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks	
<b>CASING:</b>	<b>Size</b>	<b>Wt ppf</b>	<b>Hole</b>	<b>Depth</b>	<b>Cement</b>	<b>WOC</b>	<b>Remarks</b>
Surface:	9-5/8"	36#	13-1/2"	2,019'	To Surface	12	100' into Pierre
Intermediate:	7"	32#	8-3/4"	11,150'	3,947'	24	1500' above Dakota
Production Liner:	4.5"	13 1/2	6"	21,278'	TOL @ 10.285'		50' above KOP
<b>PROBABLE PLUGS, IF REQ'D:</b>							
<b>OTHER:</b>	<b>MD</b>	<b>TVL</b>	<b>FNL/FSL</b>	<b>FEL/FWL</b>	<b>S-T-R</b>	<b>AZI</b>	
Surface:	2,019	2,019	250 FSL	150° FVL	Sec. 12 T153N-R101W	Survey Company:	
KOP:	10,335'	10,335'	250 FSL	150° FVL	Sec. 12 T153N-R101W	Build Rate:	12 deg /100'
EOC:	11,085'	10,812'	150° FNL	88° FWL	Sec. 13 T153N-R101W	150.0	
Casing Point:	11,150'	10,812'	215° FNL	921° FWL	Sec. 13 T153N-R101W	150.0	
Middle Bakken Lateral TD:	21,278'	10,798'	130° FEL	130° FWL	Sec. 24 T153N-R101W	179.3	
<b>Comments:</b>							
DRILL TO KOP							
DRILL CURVE TO 90 DEG AND 7" CASING POINT							
SET 7" CASING. DRILL THREE FORKS LATERAL.							
MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral							
MWD GR to be run from KOP to Lateral TD.							
<b>OASIS</b> PETROLEUM							
Geology: 1/0/1900	Engineering: L. Strong 11/21/2011						



**SECTION DETAILS**

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	
10334.7	0.00	0.00	10334.7	0.0	0.0	0.00	
11084.7	90.00	150.00	10812.2	-413.5	238.7	12.00	
11150.0	90.00	150.00	10812.2	-470.0	271.4	0.00	
12116.7	90.00	179.00	10812.2	-1391.6	527.0	3.00	
14427.2	90.00	179.00	10812.2	-3701.8	567.3	0.00	
15036.2	90.14	179.32	10811.4	-4310.8	576.2	0.06	
21275.9	90.14	179.32	10796.0	-10550.0	650.0	0.00	BHL



**OASIS**  
PETROLEUM

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
Williams County, ND**

**SURFACE CASING AND CEMENT DESIGN**

Size	Interval		Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
	From	To						Minimum	Optimum	Max
9-5/8"	0	2019	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse (psi) / a	Burst (psi) / b	Tension (1000 lbs) / c	Cost per ft
0' - 2019'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.14	3520 / 3.73	453 / 2.78	

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.0 ppg fluid on backside (2019' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2019' setting depth).
- c) Based on string weight in 9.0 ppg fluid at 2019' TVD plus 100k# overpull.  
(Buoyed weight equals 63k lbs.)

Cement volumes are based on 9-5/8" casing set in 13-1/2" hole with 60% excess to circulate cement back to surface.  
Mix and pump the following slurry.

**Pre-flush (Spacer):      20 bbls** fresh water

**Lead Slurry:**      **400 sks** (212 bbls), 11.5 lb/gal, 2.97 cu. ft./sk Varicem Cement with 0.125 lb/sk Lost Circulation Additive

**Tail Slurry:**      **195 sks** (70 bbls), 13.0 lb/gal, 2.01 cu. ft./sk Varicem with .125 lb/sk Lost Circulation Agent

**Oasis Petroleum  
Well Summary  
Yukon 5301 41-12T  
Section 12 T153N R101W  
Williams County, ND**

**INTERMEDIATE CASING AND CEMENT DESIGN**

Size	Interval	Weight	Grade	Coupling	I.D.	Drift**	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
7"	0' -11150'	32	HCP-110	LTC	6.094"	6.000**	6,730	8,970	9,870

\*\*Special Drift 7" 32# to 6.0".

Interval	Length	Description	Collapse	Burst	Tension	Condition
			(psi) a	(psi) b	(1000 lbs) c	
0' -11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 2.10*	12,460 / 1.19	797/2.03	New
0' -11150'	3950'	7", 32#, HCP-110, LTC, 8rd	11,820 / 1.07**	12,460 / 1.19		New

**API Rating & Safety Factor**

- a. \*Assume full casing evacuation with 10 ppg fluid on backside. \*\*Assume full casing evacuation with 1.2 psi/ft equivalent fluid gradient across salt intervals (from 6385' to 10335').
- b. Burst pressure based on 9,000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9.0 ppg fluid on backside—to 10812' TVD.
- c. Based on string weight in 10 ppg fluid, (276k lbs buoyed weight) plus 100k lbs overpull.

Cement volumes are estimates based on 7" casing set in an 8-3/4" hole with 30% excess.

**Pre-flush (Spacer):**      **50 bbls Saltwater**  
**40 bbls Tuned Spacer III**

**Lead Slurry:**      **184 sks** (85 bbls), 11.8 ppg, 2.55 cu. ft./sk Econocem Cement with .3% Fe-2 and .25 lb/sk Lost Circulation Additive

**Tail Slurry:**      **601 sks** (166 bbls), 14.0 ppg, 1.55 cu. ft./sk Extendcem System with .2% HR-5 Retarder and .25 lb/sk Lost Circulation Additive

**Oasis Petroleum  
Well Summary**

**Yukon 5301 41-12T**  
**Section 12 T153N R101W**  
**Williams County, ND**

PRODUCTION LINER

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10285'-21276'	13.5	P-110	BTC	3.92"	3.795"	2,270	3,020	3,780

Interval	Length	Description	Collapse (psi) a	Burst (psi) b	Tension (1000 lbs) c	Condition
10285'-21276'	10991'	4-1/2", 13.5 lb, P-110, BTC	10670 / 2.00	12410 / 1.19	422 / 2.03	New

API Rating & Safety Factor

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10812' TVD.
- b) Burst pressure based on 9,000 psi treating pressure with 10.2 ppg internal fluid gradient and 9.0 ppg external fluid gradient @ 10812' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 108k lbs.) plus 100k lbs overpull.

# **Oasis**

**Indian Hills  
153N-101W-13/24  
Yukon 5301 41-12T**

**Yukon 5301 41-12T**

**Plan: Design #1**

## **Standard Survey Report**

**28 March, 2013**

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T						
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)						
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)						
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True						
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature						
<b>Design:</b>	Design #1	<b>Database:</b>	OpenWellsCompass - EDM Prod						
<b>Project</b>	Indian Hills								
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level						
<b>Geo Datum:</b>	North American Datum 1983								
<b>Map Zone:</b>	North Dakota Northern Zone								
<b>Site</b>	153N-101W-13/24								
<b>Site Position:</b>		<b>Northing:</b>	125,067.66 m						
<b>From:</b>	Lat/Long	<b>Easting:</b>	368,214.56 m						
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in						
<b>Well</b>	Yukon 5301 41-12T								
<b>Well Position</b>	+N/S +E/W	0.0 ft	<b>Northing:</b> 125,117.59 m <b>Easting:</b> 367,394.12 m						
			<b>Latitude:</b> 48° 4' 57.960 N <b>Longitude:</b> 103° 36' 43.250 W						
<b>Position Uncertainty</b>	0.0 ft		<b>Grid Convergence:</b> -2.32 °						
<b>Wellbore</b>	Yukon 5301 41-12T								
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b> (°)	<b>Dip Angle</b> (°)	<b>Field Strength</b> (nT)				
	IGRF200510	3/12/2013	8.35	73.03	56,594				
<b>Design</b>	Design #1								
<b>Audit Notes:</b>									
<b>Version:</b>		<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0				
<b>Vertical Section:</b>		<b>Depth From (TVD)</b> (ft)	<b>+N/S</b> (ft)	<b>+E/W</b> (ft)	<b>Direction</b> (°)				
		0.0	0.0	0.0	176.47				
<b>Survey Tool Program</b>	Date	3/28/2013							
<b>From</b> (ft)	<b>To</b> (ft)	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>					
0.0		21,275.9 Design #1 (Yukon 5301 41-12T)	MWD	MWD - Standard					
<b>Planned Survey</b>									
<b>Measured</b> <b>Depth</b> (ft)	<b>Inclination</b> (°)	<b>Azimuth</b> (°)	<b>Vertical</b> <b>Depth</b> (ft)	<b>+N/S</b> (ft)	<b>+E/W</b> (ft)	<b>Vertical</b> <b>Section</b> (ft)	<b>Dogleg</b> <b>Rate</b> (°/100ft)	<b>Build</b> <b>Rate</b> (°/100ft)	<b>Turn</b> <b>Rate</b> (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>				Well Yukon 5301 41-12T			
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>				WELL @ 2119.0ft (Original Well Elev)			
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>				WELL @ 2119.0ft (Original Well Elev)			
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>				True			
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>				Minimum Curvature			
<b>Design:</b>	Design #1	<b>Database:</b>				OpenWellsCompass - EDM Prod			
<b>Planned Survey</b>									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,919.0	0.00	0.00	1,919.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pierre</b>									
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,629.0	0.00	0.00	4,629.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Greenhorn</b>									
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>				Well Yukon 5301 41-12T			
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>				WELL @ 2119.0ft (Original Well Elev)			
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>				WELL @ 2119.0ft (Original Well Elev)			
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>				True			
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>				Minimum Curvature			
<b>Design:</b>	Design #1	<b>Database:</b>				OpenWellsCompass - EDM Prod			
<b>Planned Survey</b>									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,020.0	0.00	0.00	5,020.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Mowry</b>									
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,447.0	0.00	0.00	5,447.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dakota</b>									
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,365.0	0.00	0.00	6,365.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Rierdon</b>									
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,885.0	0.00	0.00	6,885.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dunham Salt</b>									
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,961.0	0.00	0.00	6,961.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dunham Salt Base</b>									
6,966.0	0.00	0.00	6,966.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Spearfish</b>									
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,271.0	0.00	0.00	7,271.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pine Salt</b>									
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,326.0	0.00	0.00	7,326.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pine Salt Base</b>									
7,355.0	0.00	0.00	7,355.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Opeche Salt</b>									
7,395.0	0.00	0.00	7,395.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Opeche Salt Base</b>									

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	OpenWellsCompass - EDM Prod

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,599.0	0.00	0.00	7,599.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Broom Creek (Top of Minnelusa Gp.)</b>										
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,657.0	0.00	0.00	7,657.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Amesden</b>										
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,845.0	0.00	0.00	7,845.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Tyler</b>										
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,018.0	0.00	0.00	8,018.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Otter (Base of Minnelusa Gp.)</b>										
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,369.0	0.00	0.00	8,369.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Kibbey</b>										
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,515.0	0.00	0.00	8,515.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Charles Salt</b>										
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,141.0	0.00	0.00	9,141.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>UB</b>										
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,217.0	0.00	0.00	9,217.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Base Last Salt</b>										
9,262.0	0.00	0.00	9,262.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Ratcliffe</b>										
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,437.0	0.00	0.00	9,437.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Mission Canyon</b>										
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

## Survey Report

<b>Company:</b>	Oasis							<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T	
<b>Project:</b>	Indian Hills							<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)	
<b>Site:</b>	153N-101W-13/24							<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)	
<b>Well:</b>	Yukon 5301 41-12T							<b>North Reference:</b>	True	
<b>Wellbore:</b>	Yukon 5301 41-12T							<b>Survey Calculation Method:</b>	Minimum Curvature	
<b>Design:</b>	Design #1							<b>Database:</b>	OpenWellsCompass - EDM Prod	
<b>Planned Survey</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Lodgepole</b>										
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,177.0	0.00	0.00	10,177.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Lodgepole Fracture Zone</b>										
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,334.7	0.00	0.00	10,334.7	0.0	0.0	0.0	0.00	0.00	0.00	0.00
10,400.0	7.84	150.00	10,399.8	-3.9	2.2	4.0	12.00	12.00	0.00	0.00
10,500.0	19.84	150.00	10,496.7	-24.5	14.2	25.4	12.00	12.00	0.00	0.00
10,600.0	31.84	150.00	10,586.6	-62.2	35.9	64.3	12.00	12.00	0.00	0.00
10,699.0	43.72	150.00	10,664.7	-114.6	66.2	118.5	12.00	12.00	0.00	0.00
<b>False Bakken</b>										
10,700.0	43.84	150.00	10,665.4	-115.2	66.5	119.1	12.00	12.00	0.00	0.00
10,707.0	44.68	150.00	10,670.4	-119.5	69.0	123.5	12.00	12.00	0.00	0.00
<b>Upper Bakken</b>										
10,717.0	45.88	150.00	10,677.4	-125.6	72.5	129.8	12.00	12.00	0.00	0.00
<b>Middle Bakken</b>										
10,760.0	51.04	150.00	10,705.9	-153.5	88.6	158.6	12.00	12.00	0.00	0.00
<b>Lower Bakken</b>										
10,772.0	52.48	150.00	10,713.4	-161.6	93.3	167.1	12.00	12.00	0.00	0.00
<b>Pronghorn</b>										
10,789.0	54.52	150.00	10,723.5	-173.5	100.2	179.3	12.00	12.00	0.00	0.00
<b>Three Forks</b>										
10,800.0	55.84	150.00	10,729.8	-181.3	104.7	187.4	12.00	12.00	0.00	0.00
10,900.0	67.84	150.00	10,776.9	-257.5	148.7	266.2	12.00	12.00	0.00	0.00
11,000.0	79.84	150.00	10,804.7	-340.5	196.6	352.0	12.00	12.00	0.00	0.00
11,084.7	90.00	150.00	10,812.2	-413.5	238.7	427.4	12.00	12.00	0.00	0.00
11,100.0	90.00	150.00	10,812.2	-426.7	246.4	441.1	0.00	0.00	0.00	0.00
11,150.0	90.00	150.00	10,812.2	-470.0	271.4	485.8	0.00	0.00	0.00	0.00
11,200.0	90.00	151.50	10,812.2	-513.7	295.8	530.9	3.00	0.00	3.00	
11,300.0	90.00	154.50	10,812.2	-602.8	341.2	622.6	3.00	0.00	3.00	
11,400.0	90.00	157.50	10,812.2	-694.1	381.9	716.3	3.00	0.00	3.00	
11,500.0	90.00	160.50	10,812.2	-787.5	417.7	811.7	3.00	0.00	3.00	
11,600.0	90.00	163.50	10,812.2	-882.5	448.6	908.5	3.00	0.00	3.00	
11,700.0	90.00	166.50	10,812.2	-979.1	474.5	1,006.5	3.00	0.00	3.00	
11,800.0	90.00	169.50	10,812.2	-1,076.9	495.3	1,105.4	3.00	0.00	3.00	
11,900.0	90.00	172.50	10,812.2	-1,175.7	510.9	1,204.9	3.00	0.00	3.00	
12,000.0	90.00	175.50	10,812.2	-1,275.1	521.4	1,304.8	3.00	0.00	3.00	
12,100.0	90.00	178.50	10,812.2	-1,375.0	526.6	1,404.8	3.00	0.00	3.00	
12,116.7	90.00	179.00	10,812.2	-1,391.6	527.0	1,421.4	3.00	0.00	3.00	
12,200.0	90.00	179.00	10,812.2	-1,475.0	528.4	1,504.7	0.00	0.00	0.00	
12,300.0	90.00	179.00	10,812.2	-1,575.0	530.2	1,604.6	0.00	0.00	0.00	

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	OpenWellsCompass - EDM Prod

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,400.0	90.00	179.00	10,812.2	-1,674.9	531.9	1,704.5	0.00	0.00	0.00
12,500.0	90.00	179.00	10,812.2	-1,774.9	533.7	1,804.4	0.00	0.00	0.00
12,600.0	90.00	179.00	10,812.2	-1,874.9	535.4	1,904.3	0.00	0.00	0.00
12,700.0	90.00	179.00	10,812.2	-1,974.9	537.1	2,004.2	0.00	0.00	0.00
12,800.0	90.00	179.00	10,812.2	-2,074.9	538.9	2,104.1	0.00	0.00	0.00
12,900.0	90.00	179.00	10,812.2	-2,174.9	540.6	2,204.0	0.00	0.00	0.00
13,000.0	90.00	179.00	10,812.2	-2,274.8	542.4	2,303.9	0.00	0.00	0.00
13,100.0	90.00	179.00	10,812.2	-2,374.8	544.1	2,403.8	0.00	0.00	0.00
13,200.0	90.00	179.00	10,812.2	-2,474.8	545.9	2,503.7	0.00	0.00	0.00
13,300.0	90.00	179.00	10,812.2	-2,574.8	547.6	2,603.6	0.00	0.00	0.00
13,400.0	90.00	179.00	10,812.2	-2,674.8	549.4	2,703.5	0.00	0.00	0.00
13,500.0	90.00	179.00	10,812.2	-2,774.8	551.1	2,803.4	0.00	0.00	0.00
13,600.0	90.00	179.00	10,812.2	-2,874.8	552.9	2,903.3	0.00	0.00	0.00
13,700.0	90.00	179.00	10,812.2	-2,974.7	554.6	3,003.2	0.00	0.00	0.00
13,800.0	90.00	179.00	10,812.2	-3,074.7	556.3	3,103.1	0.00	0.00	0.00
13,900.0	90.00	179.00	10,812.2	-3,174.7	558.1	3,203.0	0.00	0.00	0.00
14,000.0	90.00	179.00	10,812.2	-3,274.7	559.8	3,302.9	0.00	0.00	0.00
14,100.0	90.00	179.00	10,812.2	-3,374.7	561.6	3,402.8	0.00	0.00	0.00
14,200.0	90.00	179.00	10,812.2	-3,474.7	563.3	3,502.7	0.00	0.00	0.00
14,300.0	90.00	179.00	10,812.2	-3,574.6	565.1	3,602.6	0.00	0.00	0.00
14,400.0	90.00	179.00	10,812.2	-3,674.6	566.8	3,702.5	0.00	0.00	0.00
14,427.2	90.00	179.00	10,812.2	-3,701.8	567.3	3,729.7	0.00	0.00	0.00
14,500.0	90.02	179.04	10,812.2	-3,774.6	568.5	3,802.4	0.06	0.02	0.05
14,600.0	90.04	179.09	10,812.1	-3,874.6	570.2	3,902.3	0.06	0.02	0.05
14,700.0	90.06	179.14	10,812.0	-3,974.6	571.7	4,002.2	0.06	0.02	0.05
14,800.0	90.09	179.20	10,811.9	-4,074.6	573.2	4,102.1	0.06	0.02	0.05
14,900.0	90.11	179.25	10,811.7	-4,174.6	574.5	4,202.0	0.06	0.02	0.05
15,000.0	90.13	179.30	10,811.5	-4,274.6	575.8	4,301.9	0.06	0.02	0.05
15,036.2	90.14	179.32	10,811.4	-4,310.8	576.2	4,338.1	0.06	0.02	0.05
15,100.0	90.14	179.32	10,811.3	-4,374.6	577.0	4,401.8	0.00	0.00	0.00
15,200.0	90.14	179.32	10,811.0	-4,474.5	578.1	4,501.6	0.00	0.00	0.00
15,300.0	90.14	179.32	10,810.8	-4,574.5	579.3	4,601.5	0.00	0.00	0.00
15,400.0	90.14	179.32	10,810.5	-4,674.5	580.5	4,701.4	0.00	0.00	0.00
15,500.0	90.14	179.32	10,810.3	-4,774.5	581.7	4,801.3	0.00	0.00	0.00
15,600.0	90.14	179.32	10,810.0	-4,874.5	582.9	4,901.1	0.00	0.00	0.00
15,700.0	90.14	179.32	10,809.8	-4,974.5	584.1	5,001.0	0.00	0.00	0.00
15,800.0	90.14	179.32	10,809.5	-5,074.5	585.2	5,100.9	0.00	0.00	0.00
15,900.0	90.14	179.32	10,809.3	-5,174.5	586.4	5,200.8	0.00	0.00	0.00
16,000.0	90.14	179.32	10,809.0	-5,274.5	587.6	5,300.6	0.00	0.00	0.00
16,100.0	90.14	179.32	10,808.8	-5,374.5	588.8	5,400.5	0.00	0.00	0.00
16,200.0	90.14	179.32	10,808.5	-5,474.5	590.0	5,500.4	0.00	0.00	0.00
16,300.0	90.14	179.32	10,808.3	-5,574.5	591.2	5,600.3	0.00	0.00	0.00
16,400.0	90.14	179.32	10,808.0	-5,674.5	592.3	5,700.1	0.00	0.00	0.00

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	OpenWellsCompass - EDM Prod

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,500.0	90.14	179.32	10,807.8	-5,774.5	593.5	5,800.0	0.00	0.00	0.00
16,600.0	90.14	179.32	10,807.5	-5,874.4	594.7	5,899.9	0.00	0.00	0.00
16,700.0	90.14	179.32	10,807.3	-5,974.4	595.9	5,999.8	0.00	0.00	0.00
16,800.0	90.14	179.32	10,807.1	-6,074.4	597.1	6,099.7	0.00	0.00	0.00
16,900.0	90.14	179.32	10,806.8	-6,174.4	598.2	6,199.5	0.00	0.00	0.00
17,000.0	90.14	179.32	10,806.6	-6,274.4	599.4	6,299.4	0.00	0.00	0.00
17,100.0	90.14	179.32	10,806.3	-6,374.4	600.6	6,399.3	0.00	0.00	0.00
17,200.0	90.14	179.32	10,806.1	-6,474.4	601.8	6,499.2	0.00	0.00	0.00
17,300.0	90.14	179.32	10,805.8	-6,574.4	603.0	6,599.0	0.00	0.00	0.00
17,400.0	90.14	179.32	10,805.6	-6,674.4	604.2	6,698.9	0.00	0.00	0.00
17,500.0	90.14	179.32	10,805.3	-6,774.4	605.3	6,798.8	0.00	0.00	0.00
17,600.0	90.14	179.32	10,805.1	-6,874.4	606.5	6,898.7	0.00	0.00	0.00
17,700.0	90.14	179.32	10,804.8	-6,974.4	607.7	6,998.5	0.00	0.00	0.00
17,800.0	90.14	179.32	10,804.6	-7,074.4	608.9	7,098.4	0.00	0.00	0.00
17,900.0	90.14	179.32	10,804.3	-7,174.4	610.1	7,198.3	0.00	0.00	0.00
18,000.0	90.14	179.32	10,804.1	-7,274.3	611.3	7,298.2	0.00	0.00	0.00
18,100.0	90.14	179.32	10,803.8	-7,374.3	612.4	7,398.0	0.00	0.00	0.00
18,200.0	90.14	179.32	10,803.6	-7,474.3	613.6	7,497.9	0.00	0.00	0.00
18,300.0	90.14	179.32	10,803.4	-7,574.3	614.8	7,597.8	0.00	0.00	0.00
18,400.0	90.14	179.32	10,803.1	-7,674.3	616.0	7,697.7	0.00	0.00	0.00
18,500.0	90.14	179.32	10,802.9	-7,774.3	617.2	7,797.5	0.00	0.00	0.00
18,600.0	90.14	179.32	10,802.6	-7,874.3	618.4	7,897.4	0.00	0.00	0.00
18,700.0	90.14	179.32	10,802.4	-7,974.3	619.5	7,997.3	0.00	0.00	0.00
18,800.0	90.14	179.32	10,802.1	-8,074.3	620.7	8,097.2	0.00	0.00	0.00
18,900.0	90.14	179.32	10,801.9	-8,174.3	621.9	8,197.1	0.00	0.00	0.00
19,000.0	90.14	179.32	10,801.6	-8,274.3	623.1	8,296.9	0.00	0.00	0.00
19,100.0	90.14	179.32	10,801.4	-8,374.3	624.3	8,396.8	0.00	0.00	0.00
19,200.0	90.14	179.32	10,801.1	-8,474.3	625.4	8,496.7	0.00	0.00	0.00
19,300.0	90.14	179.32	10,800.9	-8,574.2	626.6	8,596.6	0.00	0.00	0.00
19,400.0	90.14	179.32	10,800.6	-8,674.2	627.8	8,696.4	0.00	0.00	0.00
19,500.0	90.14	179.32	10,800.4	-8,774.2	629.0	8,796.3	0.00	0.00	0.00
19,600.0	90.14	179.32	10,800.1	-8,874.2	630.2	8,896.2	0.00	0.00	0.00
19,700.0	90.14	179.32	10,799.9	-8,974.2	631.4	8,996.1	0.00	0.00	0.00
19,800.0	90.14	179.32	10,799.6	-9,074.2	632.5	9,095.9	0.00	0.00	0.00
19,900.0	90.14	179.32	10,799.4	-9,174.2	633.7	9,195.8	0.00	0.00	0.00
20,000.0	90.14	179.32	10,799.2	-9,274.2	634.9	9,295.7	0.00	0.00	0.00
20,100.0	90.14	179.32	10,798.9	-9,374.2	636.1	9,395.6	0.00	0.00	0.00
20,200.0	90.14	179.32	10,798.7	-9,474.2	637.3	9,495.4	0.00	0.00	0.00
20,300.0	90.14	179.32	10,798.4	-9,574.2	638.5	9,595.3	0.00	0.00	0.00
20,400.0	90.14	179.32	10,798.2	-9,674.2	639.6	9,695.2	0.00	0.00	0.00
20,500.0	90.14	179.32	10,797.9	-9,774.2	640.8	9,795.1	0.00	0.00	0.00
20,600.0	90.14	179.32	10,797.7	-9,874.2	642.0	9,894.9	0.00	0.00	0.00
20,700.0	90.14	179.32	10,797.4	-9,974.1	643.2	9,994.8	0.00	0.00	0.00
20,800.0	90.14	179.32	10,797.2	-10,074.1	644.4	10,094.7	0.00	0.00	0.00

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	OpenWellsCompass - EDM Prod

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)
20,900.0	90.14	179.32	10,796.9	-10,174.1	645.6	10,194.6	0.00	0.00	0.00
21,275.9	90.14	179.32	10,796.0	-10,550.0	650.0	10,570.0	0.00	0.00	0.00

### Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
BHL - plan hits target center - Point	0.00	0.00	10,796.0	-10,550.0	650.0	121,896.56	367,461.69	48° 3' 14.382 N	103° 37' 13.392 W

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,019.0	2,019.0 9 5/8"		9.625	13.500
11,150.0	10,812.2 7"		7.000	8.750

## Survey Report

<b>Company:</b>	Oasis	<b>Local Co-ordinate Reference:</b>	Well Yukon 5301 41-12T
<b>Project:</b>	Indian Hills	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-13/24	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Well:</b>	Yukon 5301 41-12T	<b>North Reference:</b>	True
<b>Wellbore:</b>	Yukon 5301 41-12T	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Design #1	<b>Database:</b>	OpenWellsCompass - EDM Prod

**Formations**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,919.0	1,919.0	Pierre			
4,629.0	4,629.0	Greenhorn			
5,020.0	5,020.0	Mowry			
5,447.0	5,447.0	Dakota			
6,365.0	6,365.0	Rierdon			
6,885.0	6,885.0	Dunham Salt			
6,961.0	6,961.0	Dunham Salt Base			
6,966.0	6,966.0	Spearfish			
7,271.0	7,271.0	Pine Salt			
7,326.0	7,326.0	Pine Salt Base			
7,355.0	7,355.0	Opeche Salt			
7,395.0	7,395.0	Opeche Salt Base			
7,599.0	7,599.0	Broom Creek (Top of Minnelusa Gp.)			
7,657.0	7,657.0	Armsden			
7,845.0	7,845.0	Tyler			
8,018.0	8,018.0	Otter (Base of Minnelusa Gp.)			
8,369.0	8,369.0	Kibbey			
8,515.0	8,515.0	Charles Salt			
9,141.0	9,141.0	UB			
9,217.0	9,217.0	Base Last Salt			
9,262.0	9,262.0	Ratcliffe			
9,437.0	9,437.0	Mission Canyon			
10,000.0	10,000.0	Lodgepole			
10,177.0	10,177.0	Lodgepole Fracture Zone			
10,699.0	10,664.7	False Bakken			
10,707.0	10,670.4	Upper Bakken			
10,717.0	10,677.4	Middle Bakken			
10,760.0	10,705.9	Lower Bakken			
10,772.0	10,713.4	Pronghorn			
10,789.0	10,723.5	Three Forks			

Checked By: \_\_\_\_\_

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

**WELL LOCATION PLAT**  
 OASIS PETROLEUM NORTH AMERICA, LLC  
 1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
 "YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
 SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

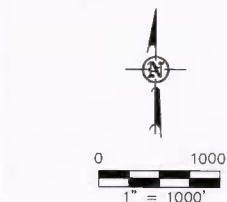
THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN, PLS, REGISTRATION NUMBER 3880 ON 2/06/13 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.



STAKED ON 11/17/11  
 VERTICAL CONTROL DATUM WAS BASED UPON  
 CONTROL POINT 13 WITH AN ELEVATION OF 2090.8'

THIS SURVEY AND PLAT IS BEING PROVIDED AT THE REQUEST OF FABIAN KJORSTAD OF OASIS PETROLEUM. I CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DARYL D. KASEMAN LS-3880



- ✖ - MONUMENT - RECOVERED
- ✗ - MONUMENT - NOT RECOVERED



© 2011, INTERSTATE ENGINEERING, INC.

**1/8**  
 SHEET NO.  
  
 Interstate  
 ENGINEERING  
 Professionals you need, people you trust

Interstate Engineering, Inc.  
 P.O. Box 648  
 425 East Main Street  
 Sidney, Montana 59270  
 Ph: (406) 433-5617  
 Fax: (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
 WELL LOCATION PLAT  
 SECTION 12, T153N, R101W  
 MCKENZIE COUNTY, NORTH DAKOTA  
 Drawn By: J.J.S. Project No.: S11-09-339  
 Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JDS	Moved bottom hole
REV 2	12/13/11	JHS	Changed to double pad
REV 3	2/5/13	BHS	Moved bottom hole / changed name

S-DRILLER-PLAT-029  
 Version 1.1, 1/11, Rev. 1-12-15 # 24-1158  
 2/27/2012 4:59 PM (ewm)

**SECTION BREAKDOWN**  
OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002

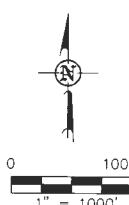
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTIONS 12, 13 & 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN PLS. REGISTRATION NUMBER 3880 ON 2/06/13, AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.



ALL AZIMUTHS ARE BASED ON G.P.S. OBSERVATIONS. THE ORIGINAL SURVEY OF THIS AREA FOR THE GENERAL LAND OFFICE (G.L.O.) WAS 1900. THE CORNERS FOUND ARE AS INDICATED AND ALL OTHERS ARE COMPUTED FROM THOSE CORNERS FOUND AND BASED ON G.L.O. DATA. THE MAPPING ANGLE FOR THIS AREA IS APPROXIMATELY -0.03°



- MONUMENT - RECOVERED



- MONUMENT - NOT RECOVERED



© 2011, INTERSTATE ENGINEERING, INC.

2/8



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)

Other offices in Missoula, Montana and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
SECTION BREAKDOWN  
SECTIONS 12, 13 & 24, T153N, R101W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-09-338  
Checked By: D.R.K. Date: NOV 2011

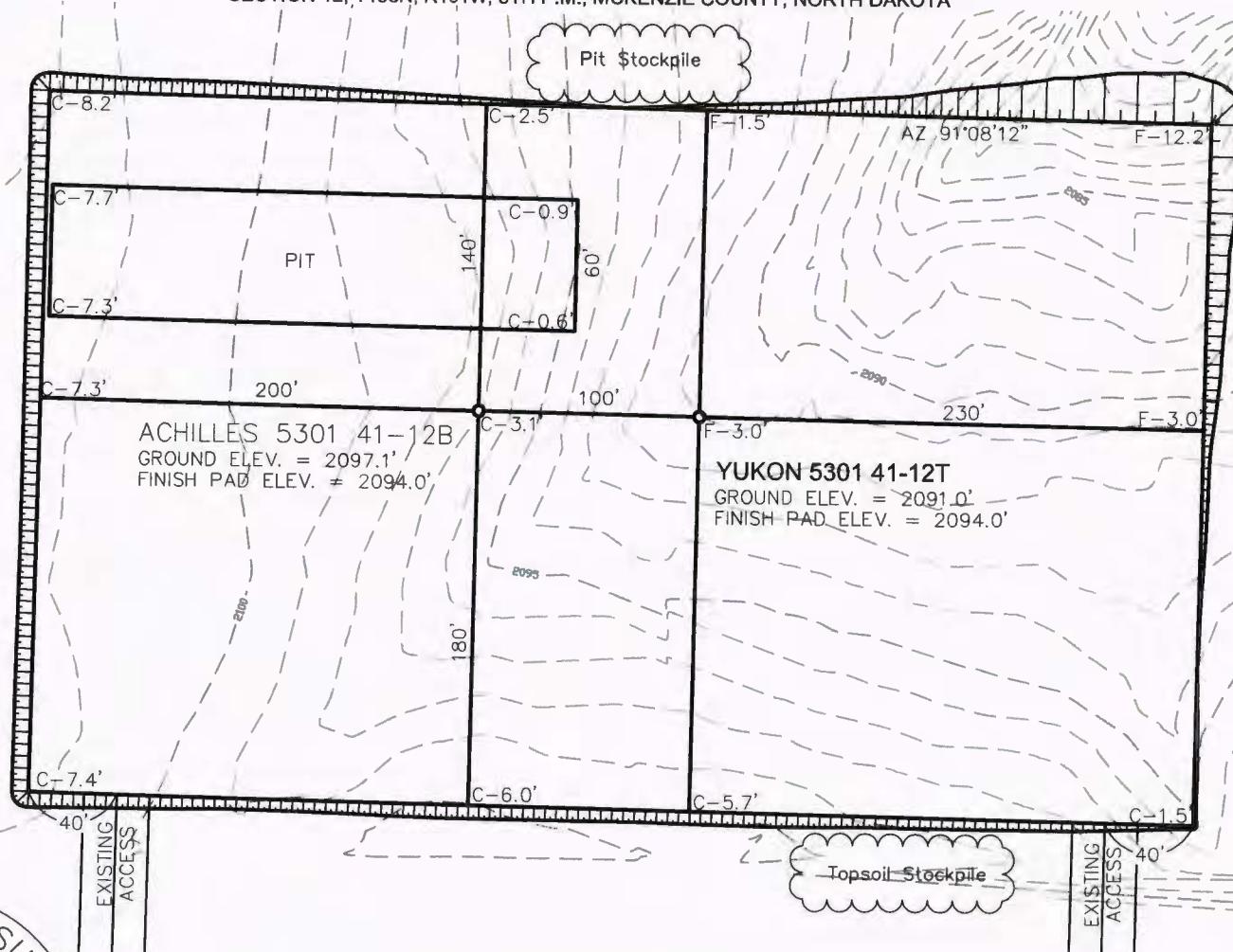
Revision No.	Date	By	Description
REV 1	12/6/11	JJS	MOVED BOTTOM HOLE
REV 2	12/13/11	JJS	CHANGED TO DOUBLE PAD
REV 3	2/5/13	BHK	MOVED BOTTOM HOLE / CHANGED NAME

3-D SURVEYING, INC. Drawn by: J.J.S. Date: NOV 2011  
INTERSTATE ENGINEERING, INC. Checked by: D.R.K. Date: NOV 2011  
DWG/CAD/Mech Eng. 2-AUG-2013 12:45 PM bath software

# PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



THIS DOCUMENT WAS ORIGINALLY  
ISSUED AND SEALED BY DARYL D.  
KASEMAN, PLS, REGISTRATION NUMBER  
3880 ON 2/06/13 AND THE ORIGINAL  
DOCUMENTS ARE STORED AT THE  
OFFICES OF INTERSTATE ENGINEERING,  
INC.



NOTE: All utilities shown are preliminary only, a complete  
utilities location is recommended before construction.

0 80  
1" = 80'

© 2011, INTERSTATE ENGINEERING, INC.



**3/8**

SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax. (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in: Minnesota, North Dakota and South Dakota

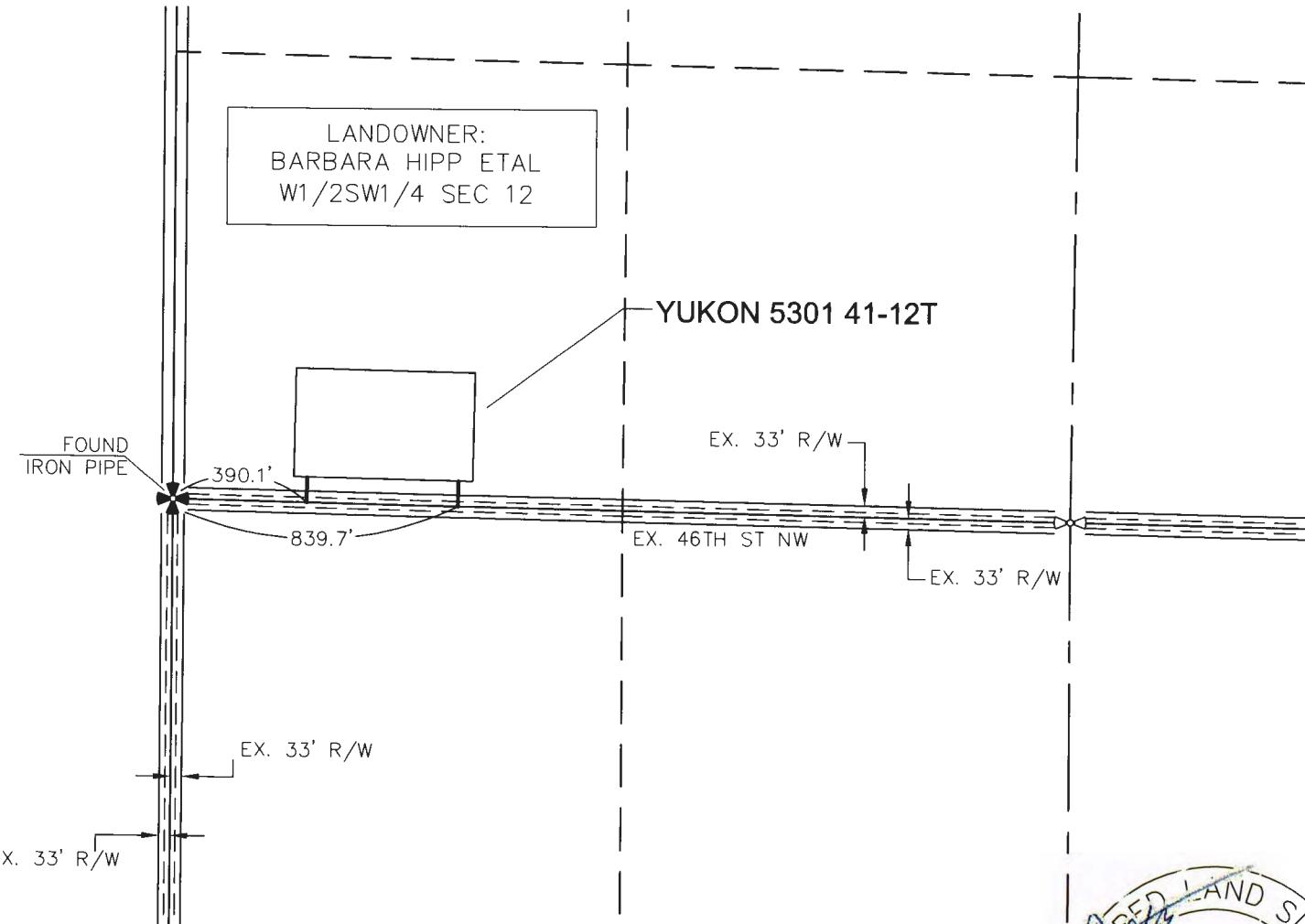
OASIS PETROLEUM NORTH AMERICA, LLC		Revision No.	Date	By	Description
PAD LAYOUT		REV 1	12/6/11	US	Moved bottom hole
SECTION 12, T153N, R101W		REV 2	12/13/11	US	CHANGED TO DOUBLE PAD
MCKENZIE COUNTY, NORTH DAKOTA		REV 3	2/5/12	SHW	Moved bottom hole / changed name
Project No.: S11-6-339					
Drawn By: J.J.S.					
Checked By: D.D.K.					
Date: NCV-2011					

# ACCESS APPROACH

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002

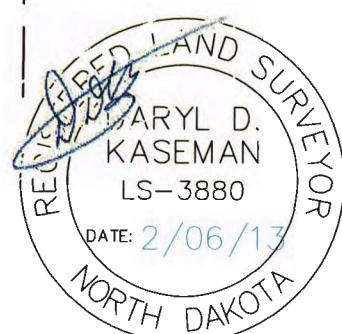
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN, PLS, REGISTRATION NUMBER 3880 ON 2/06/13 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.

NOTE: All utilities shown are preliminary only, a complete utilities location is recommended before construction.



© 2011, INTERSTATE ENGINEERING, INC.



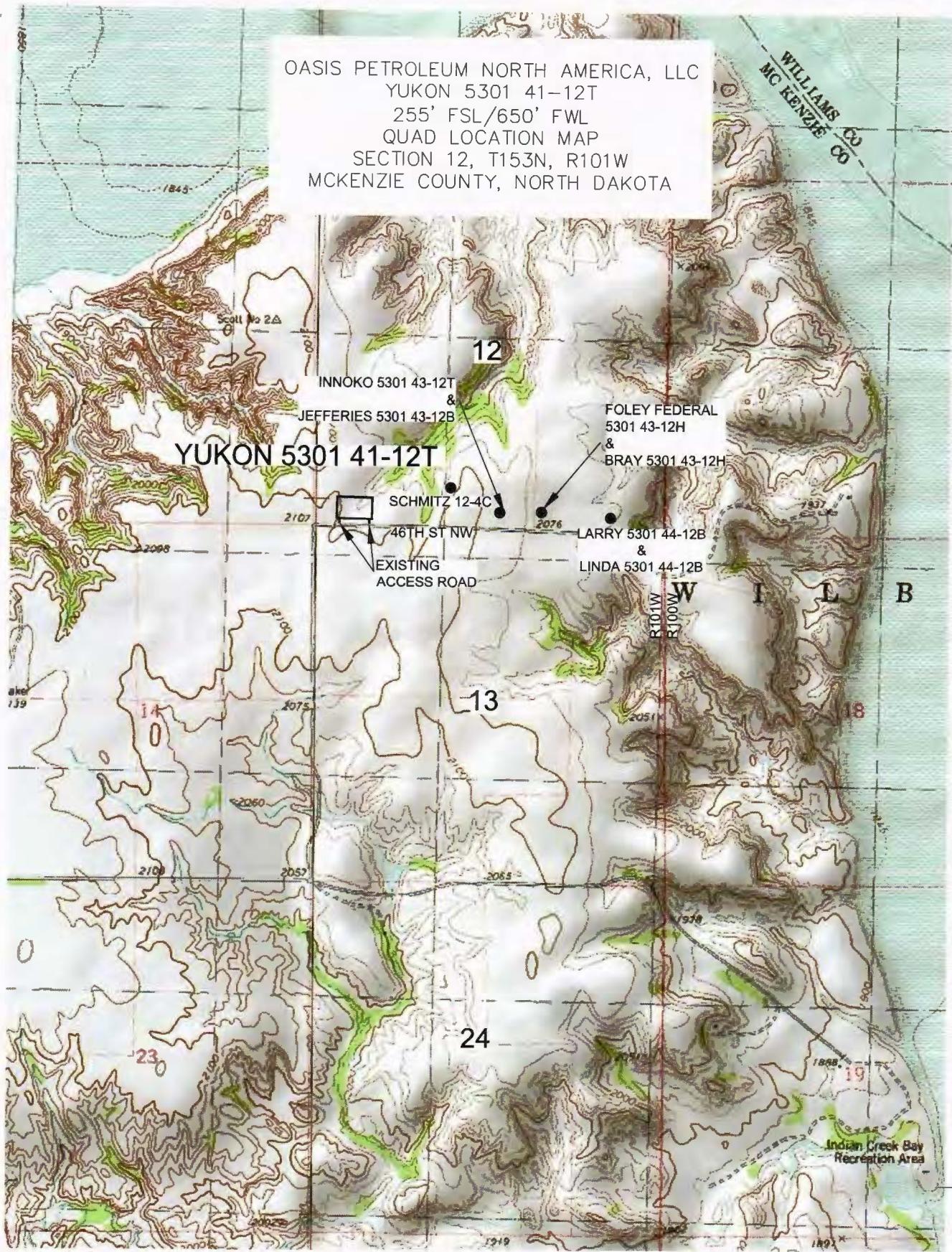
4/8

SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
www.interstateeng.com  
Other offices in Montana, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
ACCESS APPROACH  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA  
Drawn By: J.D.S.  
Project No.: S11-06-33B  
Checked By: D.D.K.  
Date: NOV 2011

Revision No.	Date	By	Description
REV. 1	12/6/11	J.S.	MORED BOTTOM HOLE
REV. 2	12/13/11	J.S.	CHANGED TO DOUBLE PAD
REV. 3	2/5/13	E.H.E.	MORED BOTTOM HOLE / CHANGED NAME



© 2011, INTERSTATE ENGINEERING, INC.

**5/8**



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
QUAD LOCATION MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-09-339  
Checked By: D.D.K. Date: NOV 2011

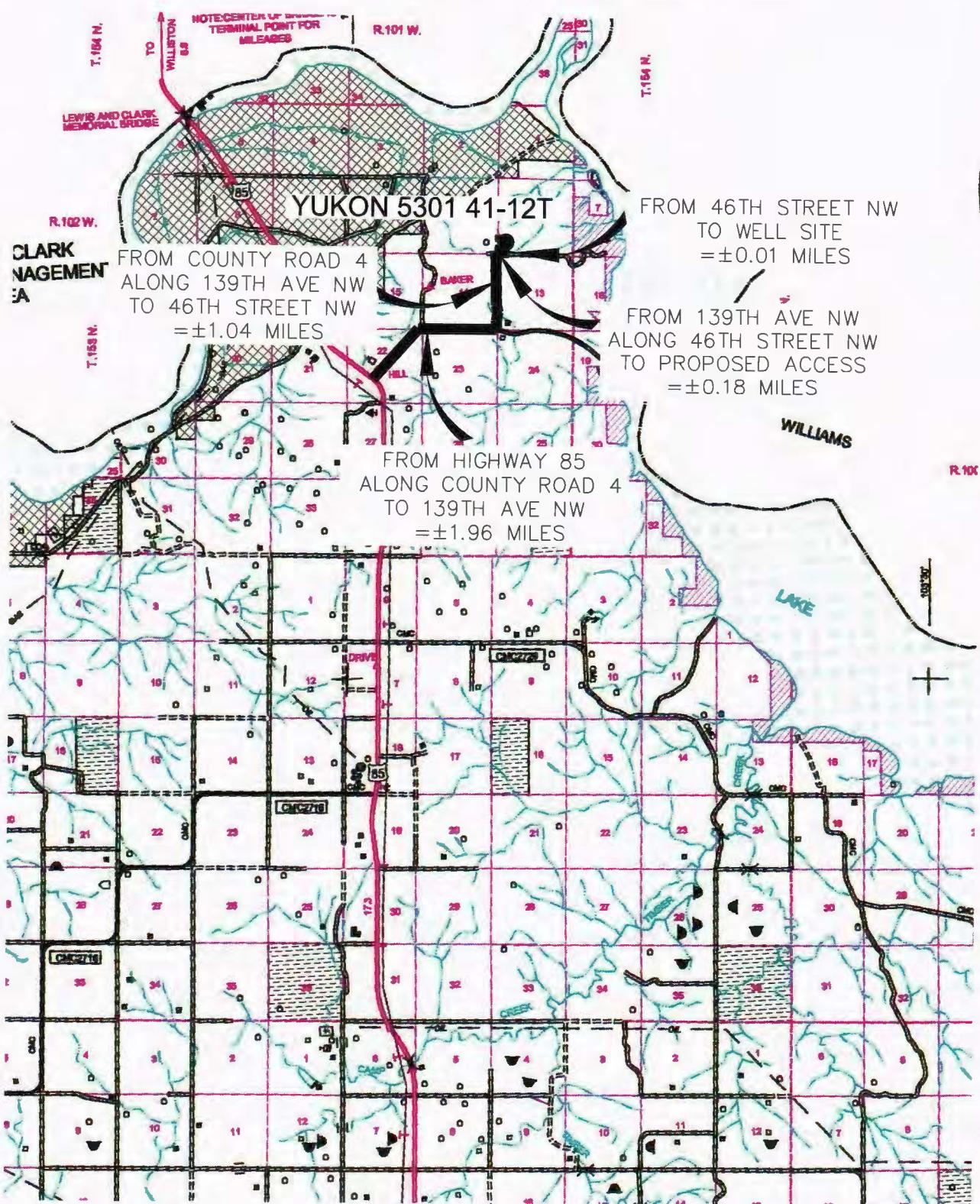
Revision No.	Date	By	Description
REV 1	12/6/11	JJS	Moved Bottom Hole
REV 2	12/13/11	JJS	Changed to Double Pad
REV 3	2/5/13	BHH	Moved Bottom Hole / Changed Name

# COUNTY ROAD MAP

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002

"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



© 2011, INTERSTATE ENGINEERING, INC.

**6/8**



SHEET NO.

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)

Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
COUNTY ROAD MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

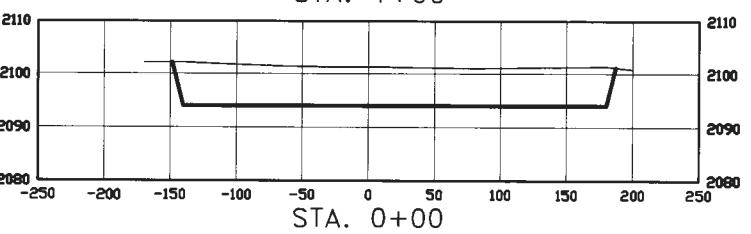
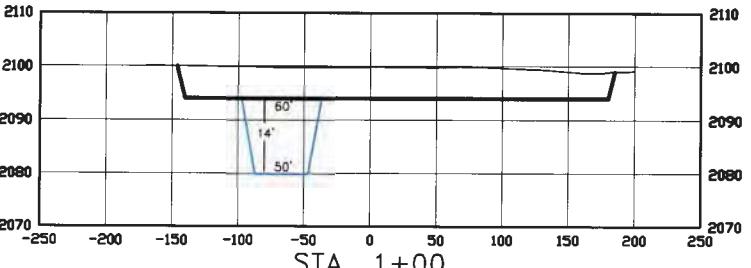
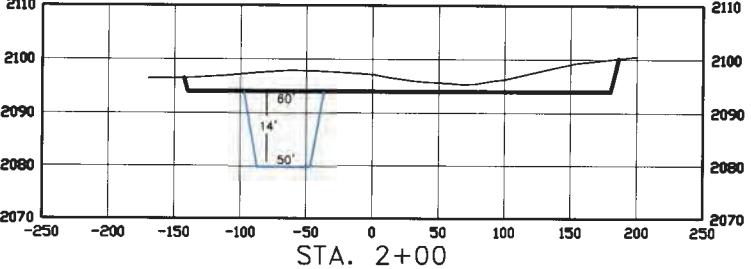
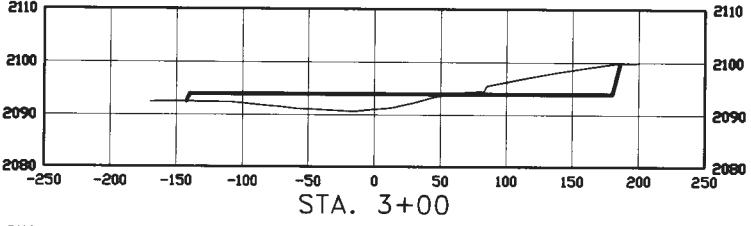
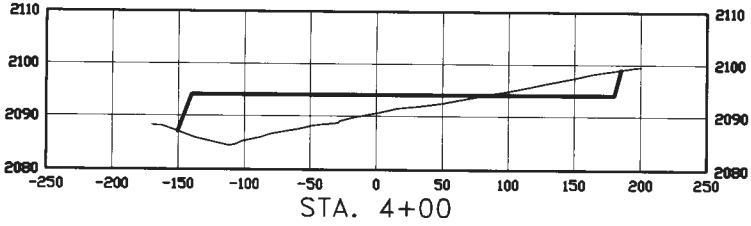
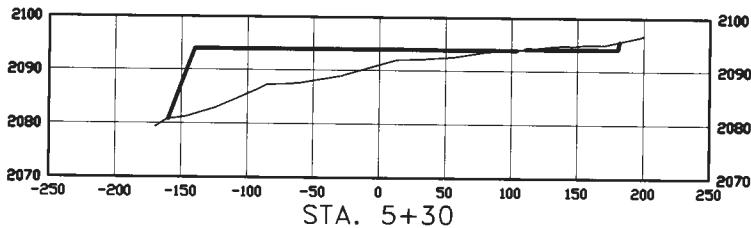
Drawn By: J.J.S. Project No.: S11-08-339  
Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JJS	Moved bottom hole
REV 2	12/13/11	JJS	Changed to double pad
REV 3	2/5/13	BHK	Moved bottom hole / changed name

# CROSS SECTIONS

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



## SCALE

HORIZ 1"=140'  
VERT 1"=35'

© 2011, INTERSTATE ENGINEERING, INC.

**7/8**  
SHEET NO.



Professionals you need, people you trust!

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)

Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
PAD CROSS SECTIONS  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-9-339  
Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JJS	Moved bottom hole
REV 2	12/13/11	JJS	Changed to double pad
REV 3	2/9/13	BHK	Moved bottom hole / changed name

# WELL LOCATION SITE QUANTITIES

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002

"YUKON 5301 41-12T"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

WELL SITE ELEVATION	2091.0
WELL PAD ELEVATION	2094.0

EXCAVATION	17,665
PLUS PIT	<u>3,150</u>
	20,815

EMBANKMENT	9,610
PLUS SHRINKAGE (30%)	<u>2,883</u>
	12,493

STOCKPILE PIT	3,150
---------------	-------

STOCKPILE TOP SOIL (6")	3,350
-------------------------	-------

STOCKPILE FROM PAD	1,822
--------------------	-------

DISTURBED AREA FROM PAD	4.15 ACRES
-------------------------	------------

**NOTE: ALL QUANTITIES ARE IN CUBIC YARDS (UNLESS NOTED)**

CUT END SLOPES AT 1:1

FILL END SLOPES AT 1.5:1

## WELL SITE LOCATION

650' FWL

255' FSL

© 2011, INTERSTATE ENGINEERING, INC.

**8/8**

SHEET NO.



Professionals you need, people you trust

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.interstateeng.com](http://www.interstateeng.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
QUANTITIES  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-09-339  
Checked By: D.D.K. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JJS	Moved bottom hole
REV 2	12/13/11	JJS	Changed to double pad
REV 3	2/5/13	BHH	Moved bottom hole / changed name



# SUNDRY NOTICES AND REPORTS ON WELLS - FORM 4

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.  
**22099**

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>Immediately</b>
<input type="checkbox"/> Report of Work Done	Date Work Completed
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	
Approximate Start Date	



<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
<input type="checkbox"/> Temporarily Abandon	<input checked="" type="checkbox"/> Reclamation
<input type="checkbox"/> Other	<b>Rescind APD permit</b>

Well Name and Number  
**Daphne 5301 41-12B**

Footages	Qtr-Qtr	Section	Township	Range
255 F S L	650 F W L	SWSW	12	153 N 101 W
Field <b>Baker</b>	Pool <b>Bakken</b>	County <b>McKenzie</b>		

## 24-HOUR PRODUCTION RATE

Before	After
Oil	Bbls
Water	Bbls
Gas	MCF

Name of Contractor(s)

Address	City	State	Zip Code

## DETAILS OF WORK

Oasis Petroleum North America LLC respectfully request that the permit issued for the above referenced well be canceled.

*Multiwell pad shares with Achilles 5301-41-12B*

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9563</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature <i>Heather McCowan</i>	Printed Name <b>Heather McCowan</b>	
Title <b>Regulatory Assistant</b>	Date <b>April 10, 2013</b>	
Email Address <b>hmccowan@oasispetroleum.com</b>		

## FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>04-12-2013</b>	
By <i>David Burns</i>	
Title <b>David Burns</b> <b>Engineering Tech.</b>	



# SUNDY NOTICE [REDACTED] REPORTS ON WELLS - FORM

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)

Well File No.  
**22099**



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>December 11, 2012</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.		<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
Approximate Start Date		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input checked="" type="checkbox"/> Other <b>Extend Drilling Permit</b>	

Well Name and Number <b>DAPHNE 5301 41-12B</b>					
Footages	Qtr-Qtr	Section	Township	Range	
<b>255 F S L</b>	<b>650 F W L</b>	<b>SWSW</b>	<b>12</b>	<b>153 N</b>	<b>101 W</b>
Field <b>Baker</b>	Pool <b>Bakken</b>			County <b>McKenzie</b>	

24-HOUR PRODUCTION RATE			
Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)			
Address		City	State
			Zip Code

## DETAILS OF WORK

The drilling permit issued for this well will expire on December 20,2012. We respectfully request a one year extension to this permit.

The \$100 filing fee can be charged to the credit card on file.

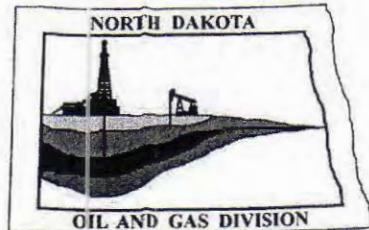
Company <b>Oasis Petroleum North America LLC</b>		Telephone Number <b>281-404-9491</b>	
Address <b>1001 Fannin Suite 1500</b>			
City <b>Houston</b>		State <b>TX</b>	Zip Code <b>77002</b>
Signature 	Printed Name <b>Jen Harold</b>		
Title <b>Regulatory Supervisor</b>	Date <b>December 11, 2012</b>		
Email Address <b>jharold@oasispetroleum.com</b>			

**Inv# 35951 L+ 12/18/2012** **CC 100.00**

**FOR STATE USE ONLY**

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>12-14-2012</b>	
By <b>David Burns</b>	
Title <b>Engineering Tech.</b>	

**David Burns**  
Engineering Tech.



# Oil and Gas Division

22099  
Lynn D. Helms - Director      Bruce E. Hicks - Assistant Director

## Department of Mineral Resources

Lynn D. Helms - Director

## North Dakota Industrial Commission

[www.dmr.nd.gov/oilgas](http://www.dmr.nd.gov/oilgas)

November 20, 2012

OASIS PETRO NO AMER  
1001 FANNIN STE 1500  
HOUSTON, TX 77002

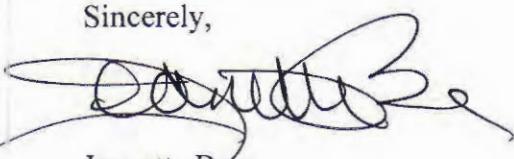
RE: DAPHNE 5301 41-12B  
SWSW Sec. 12-153N-101W  
MCKENZIE COUNTY  
WELL FILE NO. 22099

Gentlemen:

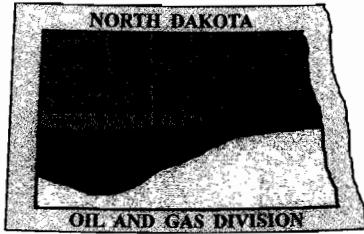
The records and files of the Industrial Commission indicate that the above referenced permit will expire December 20, 2012.

Permits to drill are only valid for one year in the State of North Dakota. If you would like to renew for another year, please submit a Form 4 along with the \$100.00 filing fee. Alternatively, you may elect to send in a Form 4 cancelling the permit. If you have any questions, please contact Todd Holweger.

Sincerely,



Jeanette Bean  
Administrative Assistant



# Oil and Gas Division

22099

Lynn D. Helms - Director      Bruce E. Hicks - Assistant Director

## Department of Mineral Resources

Lynn D. Helms - Director

## North Dakota Industrial Commission

[www.oilgas.nd.gov](http://www.oilgas.nd.gov)

ROBIN E. HESKETH  
OASIS PETROLEUM NORTH AMERICA LLC  
1001 FANNIN, SUITE 1500  
HOUSTON, TX 77002 USA

Date: 12/27/2011

### RE: CORES AND SAMPLES

Well Name: **DAPHNE 5301 41-12B** Well File No.: **22099**  
Location: **SWSW 12-153-101** County: **MCKENZIE**  
Permit Type: **Development - HORIZONTAL**  
Field: **BAKER** Target Horizon: **BAKKEN**

Dear ROBIN E. HESKETH:

North Dakota Century Code (NDCC) Section 38-08-04 provides for the preservation of cores and samples and their shipment to the State Geologist when requested. The following is required on the above referenced well:

- 1) All cores, core chips and samples must be submitted to the State Geologist as provided for the NDCC Section 38-08-04 and North Dakota Administrative Code 43-02-03-38.1.
- 2) Samples shall include all cuttings from:

#### Base of the Last Charles Salt

Samples of cuttings shall be taken at 30' maximum intervals through all vertical, build and horizontal sections. Samples must be washed, dried, packed in sample envelopes in correct order with labels showing operator, well name, location and depth, and forwarded in standard boxes to the State Geologist within 30 days of the completion of drilling operations.

- 3) Cores: ALL CORES cut shall be preserved in correct order, properly boxed, and forwarded to the State Geologist within 90 days of completion of drilling operations. Any extension of time must have written approval from the State Geologist.
- 4) All cores, core chips, and samples must be shipped, prepaid, to the State Geologist at the following address:

**ND Geological Survey Core Library  
Campus Road and Cornell  
Grand Forks, ND 58202**

- 5) NDCC Section 38-08-16 allows for a civil penalty for any violation of Chapter 38 08 not to exceed \$12,500 for each offense, and each day's violation is a separate offense.

Sincerely

Richard A. Suggs  
Geologist



# SUNDY NOTICES AND REPORTS ON WELLS - FORM 43-02-03-31

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 5749 (09-2006)



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.  
PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date <b>December 25, 2011</b>	<input type="checkbox"/> Drilling Prognosis	<input type="checkbox"/> Spill Report
<input type="checkbox"/> Report of Work Done	Date Work Completed	<input type="checkbox"/> Redrilling or Repair	<input type="checkbox"/> Shooting
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03. Approximate Start Date		<input type="checkbox"/> Casing or Liner	<input type="checkbox"/> Acidizing
		<input type="checkbox"/> Plug Well	<input type="checkbox"/> Fracture Treatment
		<input type="checkbox"/> Supplemental History	<input type="checkbox"/> Change Production Method
		<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
		<input checked="" type="checkbox"/> Other	<u>Waiver to rule Rule 43-02-03-31</u>

Well Name and Number <b>Daphne 5301 41-12B</b>					
Footages	Qtr-Qtr	Section	Township	Range	
255 F S L	650 F W L	SWSW	12	153 N	101 W
Field <b>Baker</b>	Pool <b>Bakken</b>	County <b>McKenzie</b>			

## 24-HOUR PRODUCTION RATE

Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)			
Address	City	State	Zip Code

## DETAILS OF WORK

Oasis Petroleum respectfully requests a waiver to Rule 43-02-03-31 in regards to running open hole logs for the above referenced well. Justification for this request is as follows:

*No OH Logs 2*  
The Oasis Petroleum/Bray 5301-43-12H (NDIC 20864) located less than a mile from the subject well  
The Oasis Petroleum/Feley Federal 5301-43-12H (NDIC 20863) located less than a mile from the subject well  
The Continental Resources, Inc./Montpelier 1-14H (NDIC 20566) located less than a mile from the subject well  
If this exception is approved, Oasis Petroleum will run a CBL on the intermediate string, and we will also run GR to surface. Oasis Petroleum will also submit two digital copies of each cased hole log and a copy of the mud log containing MWD gamma ray.

\* Approval per logs run on #9309 1inching 1-11 HR

Company <b>Oasis Petroleum North America LLC</b>	Telephone Number <b>281-404-9461</b>	
Address <b>1001 Fannin, Suite 1500</b>		
City <b>Houston</b>	State <b>TX</b>	Zip Code <b>77002</b>
Signature <i>Kaitlin Bass</i>	Printed Name <b>Kaitlin Bass</b>	
Title <b>Operations Assistant</b>	Date <b>December 20, 2011</b>	
Email Address <b>kbass@oasispetroleum.com</b>		

FOR STATE USE ONLY	
<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <b>12-20-2011</b>	
By <i>RC/S</i>	
Title <b>Richard A. Suggs Geologist</b>	



Approved  
TCH

#22099



22099  
S

BEFORE THE NORTH DAKOTA INDUSTRIAL COMMISSION OIL AND GAS DIVISION

In the Matter of the application of  
Oasis Petroleum North America LLC  
To waive the three day waiting period  
Prior to location construction.

- ) NOTICE OF INTENTION
- ) TO WAIVE THREE DAY
- ) WAITING PERIOD PRIOR
- ) TO CONSTRUCTION

1. Name and address of Applicant:

Oasis Petroleum North America LLC  
1001 Fannin St, Suite 1500  
Houston, TX 77002  
Attn: Kaitlin Bass

2. We request a waiver to the three day waiting period in that we may begin construction on the below mentioned location immediately upon approval of the Application for Permit to Drill.

DAPHNE 5301 41-12B

\*Spacing unit: Sections 1 & 12-153N-101W  
SWSW, 255' FSL and 650' FWL, Sec. 12 (Surface)  
SWSW, 200' FNL and 650' FWL, Sec. 1 (Bottom Hole)  
T153N – R101W Section 12  
MCKENZIE COUNTY, ND

Oasis Petroleum North America LLC has a 52.84% working interest in the Daphne 5301 41-12B. Nabors Rig 149 is currently drilling ahead at approximately 19,000' on the Catch Federal 5201 11-12H. We anticipate rig release on December 22, 2011. The rig is scheduled to move on to the Achilles next. We have construction crews ready and waiting for approval to build. Waiting three business days prior to commencing construction on the location may cause a delay in rig mobilization operations. This will cause a delay in scheduling future operations and will also create a financial burden for Oasis. Due to some last minute scheduling conflicts, we do not have a backup location built to allow this rig to move rather than wait. We respectfully ask permission to begin location construction upon approval of the permit.

Regards,

Kaitlin Bass

Operations Assistant

12/20/11

Date

Jan Stu

Drilling Engineer

12/20/2011

Date

STATE OF TEXAS

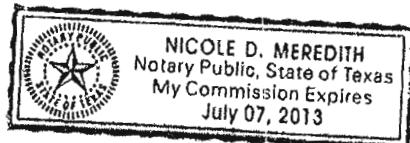
§

COUNTY OF HARRIS

§

§

On this 20th day of December, 2011, before me, a Notary Public, personally appeared Laura Strong of Oasis Petroleum North America LLC, known to me to be the person whose name is subscribed to the foregoing instrument as an agent of Oasis Petroleum North America LLC and acknowledged to me that he executed the same as his free act and deed for the purposes therein expressed, in the capacity stated, and as the act and deed of said limited liability company.

Nicole Meredith

Notary Public

Print Name: Nicole MeredithMy commission expires 7/7/13

STATE OF TEXAS

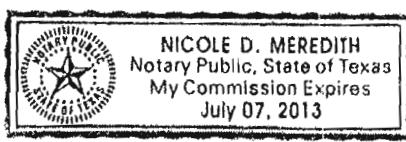
§

COUNTY OF HARRIS

§

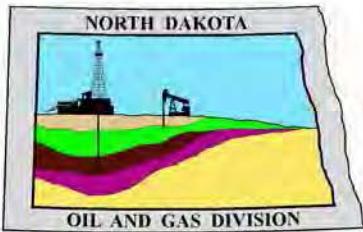
§

On this 20th day of December, 2011, before me, a Notary Public, personally appeared Kaitlin Bass of Oasis Petroleum North America LLC, known to me to be the person whose name is subscribed to the foregoing instrument as an agent of Oasis Petroleum North America LLC and acknowledged to me that he executed the same as his free act and deed for the purposes therein expressed, in the capacity stated, and as the act and deed of said limited liability company.

Nicole Meredith

Notary Public

Print Name: Nicole MeredithMy commission expires 7/7/13



# Oil and Gas Division

Lynn D. Helms - Director

Bruce E. Hicks - Assistant Director

## Department of Mineral Resources

Lynn D. Helms - Director

## North Dakota Industrial Commission

[www.oilgas.nd.gov](http://www.oilgas.nd.gov)

December 20, 2011

Kaitlin Bass  
Operations Assisant  
OASIS PETROLEUM NORTH AMERICA LLC  
1001 Fannin Suite 1500  
Houston, TX 77002

**RE: HORIZONTAL WELL  
DAPHNE 5301 41-12B  
SWSW Section 12-153N-101W  
McKenzie County  
Well File # 22099**

Dear Kaitlin :

Pursuant to Commission Order No. 18012, approval to drill the above captioned well is hereby given. The approval is granted on the condition that all portions of the well bore not isolated by cement, be no closer than the **200' setback** from the north & south boundaries and **500' setback** from the east & west boundaries within the 1280 acre spacing unit consisting of Sections 1 & 12. **Tool error is not required pursuant to order**

**PERMIT STIPULATIONS: A Closed Mud System is required on multi-well pads, although the disposal of drill cuttings is contingent upon site specific conditions to be determined by an NDIC Field Inspector. A perimeter dike is required along the north & east sides of the location. OASIS must contact NDIC Field Inspector Marc Binns at 701-220-5989 prior to location construction.**

### Form 1 Changes & Hard Lines

Any changes, shortening of casing point or lengthening at Total Depth must have prior approval by the NDIC. The proposed directional plan is at a legal location. The maximum legal coordinate from the well head at casing point is: 150W. Also, based on the azimuth of the proposed lateral the maximum legal coordinate from the well head is: 9952S & 150W.

### Location Construction Commencement (Three Day Waiting Period)

Operators shall not commence operations on a drill site until the 3rd business day following publication of the approved drilling permit on the NDIC - OGD Daily Activity Report. If circumstances require operations to commence before the 3rd business day following publication on the Daily Activity Report, the waiting period may be waived by the Director. Application for a waiver must be by sworn affidavit providing the information necessary to evaluate the extenuating circumstances, the factors of NDAC 43-02-03-16.2 (1), (a)-(f), and any other information that would allow the Director to conclude that in the event another owner seeks revocation of the drilling permit, the applicant should retain the permit.

### Permit Fee & Notification

Payment was received in the amount of \$100 via credit card .The permit fee has been received. It is requested that notification be given immediately upon the spudding of the well. This information should be relayed to the Oil & Gas Division, Bismarck, via telephone. The following information must be included: Well name, legal location, permit number, drilling contractor, company representative, date and time of spudding. Office hours are 8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m. Central Time. Our telephone number is (701) 328-8020, leave a message if after hours or on the weekend.

Kaitlin Bass  
December 20, 2011  
Page 2

### **Survey Requirements for Horizontal, Horizontal Re-entry, and Directional Wells**

NDAC Section 43-02-03-25 (Deviation Tests and Directional Surveys) states in part (that) the survey contractor shall file a certified copy of all surveys with the director free of charge within thirty days of completion. Surveys must be submitted as one electronic copy, or in a form approved by the director. However, the director may require the directional survey to be filed immediately after completion if the survey is needed to conduct the operation of the director's office in a timely manner. Certified surveys must be submitted via email in one adobe document, with a certification cover page to [certsurvey@nd.gov](mailto:certsurvey@nd.gov).

Survey points shall be of such frequency to accurately determine the entire location of the well bore.

### **Reserve pit**

Please be advised that conditions may be imposed on the use and reclamation of a drilling reserve pit on this site if specific site conditions warrant.

### **Surface casing cement**

Tail cement utilized on surface casing must have a minimum compressive strength of 500 psi within 12 hours, and tail cement utilized on production casing must have a minimum compressive strength of 500 psi before drilling the plug or initiating tests.

### **Logs**

NDAC Section 43-02-03-31 requires the running of a Cement Bond Log from which the presence of cement can be determined in every well in which production or intermediate casing has been set and a Gamma Ray Log must be run from total depth to ground level elevation of the well bore. All logs must be submitted as one paper copy and one digital copy in LAS (Log ASCII) format, or a format approved by the Director. Image logs that include, but are not limited to, Mud Logs, Cement Bond Logs, and Cyberlook Logs, cannot be produced in their entirety as LAS (Log ASCII) files. To create a solution and establish a standard format for industry to follow when submitting image logs, the Director has given approval for the operator to submit an image log as a TIFF (\*.tif) formatted file. The TIFF (\*.tif) format will be accepted only when the log cannot be produced in its entirety as a LAS (Log ASCII) file format. The digital copy may be submitted on a 3.5" floppy diskette, a standard CD, or attached to an email sent to [digitallogs@nd.gov](mailto:digitallogs@nd.gov)

Thank you for your cooperation.

Sincerely,

Todd L. Holweger  
Mineral Resources Permit Manager



# APPLICATION FOR PERMIT TO DRILL HORIZONTAL WELL - FORM 1H

INDUSTRIAL COMMISSION OF NORTH DAKOTA  
OIL AND GAS DIVISION  
600 EAST BOULEVARD DEPT 405  
BISMARCK, ND 58505-0840  
SFN 54269 (08-2005)

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

Type of Work <b>New Location</b>	Type of Well <b>Oil &amp; Gas</b>	Approximate Date Work Will Start <b>12 / 30 / 2011</b>	Confidential Status <b>No</b>
Operator <b>OASIS PETROLEUM NORTH AMERICA LLC</b>		Telephone Number <b>2814049461</b>	
Address <b>1001 Fannin Suite 1500</b>		City <b>Houston</b>	
		State <b>TX</b> Zip Code <b>77002</b>	

Notice has been provided to the owner of any permanently occupied dwelling within 1,320 feet.  This well is not located within five hundred feet of an occupied dwelling.

## WELL INFORMATION (If more than one lateral proposed, enter data for additional laterals on page 2)

Well Name <b>DAPHNE</b>			Well Number <b>5301 41-12B</b>				
Surface Footages <b>255 F S L</b>		Qtr-Qtr <b>SWSW</b>	Section <b>12</b>	Township <b>153 N</b>	Range <b>101 W</b>	County <b>McKenzie</b>	
Longstring Casing Point Footages <b>711 F S L</b>		Qtr-Qtr <b>SWSW</b>	Section <b>12</b>	Township <b>153 N</b>	Range <b>101 W</b>	County <b>McKenzie</b>	
Longstring Casing Point Coordinates From Well Head <b>456 N</b> From WH <b>5 W</b> From WH		Azimuth <b>359.4 °</b>	Longstring Total Depth <b>11030</b> Feet MD <b>10763</b> Feet TVD				
Bottom Hole Footages From Nearest Section Line <b>202 F N L</b>		Qtr-Qtr <b>LOT3</b>	Section <b>1</b>	Township <b>153 N</b>	Range <b>101 W</b>	County <b>McKenzie</b>	
Bottom Hole Coordinates From Well Head <b>9950 N</b> From WH <b>100 W</b> From WH		KOP Lateral 1 <b>10322</b> Feet MD	Azimuth Lateral 1 <b>359.4 °</b>	Estimated Total Depth Lateral 1 <b>20524</b> Feet MD <b>10729</b> Feet TVD			
Latitude of Well Head <b>48 ° 04 ' 58.50 "</b>	Longitude of Well Head <b>-103 ° 37 ' 22.96 "</b>	NAD Reference <b>NAD83</b>	Description of (Subject to NDIC Approval) <b>SPACING UNIT: Sec 1 &amp; 12</b>				
Ground Elevation <b>2091</b> Feet Above S.L.	Acres in Spacing/Drilling Unit <b>1280</b>	Spacing/Drilling Unit Setback Requirement <b>200</b> Feet N/S <b>500</b> Feet E/W			Industrial Commission Order <b>18012</b>		
North Line of Spacing/Drilling Unit <b>5280</b> Feet	South Line of Spacing/Drilling Unit <b>5278</b> Feet	East Line of Spacing/Drilling Unit <b>10443</b> Feet			West Line of Spacing/Drilling Unit <b>10407</b> Feet		
Objective Horizons <b>BAKKEN</b>						Pierre Shale Top <b>1969</b>	
Proposed Surface Casing	Size <b>9 - 5/8 "</b>	Weight <b>36</b> Lb./Ft.	Depth <b>2070</b> Feet	Cement Volume <b>643</b> Sacks	NOTE: Surface hole must be drilled with fresh water and surface casing must be cemented back to surface.		
Proposed Longstring Casing	Size <b>7 - "</b>	Weight(s) <b>29&amp;32</b> Lb./Ft.	Longstring Total Depth <b>11030</b> Feet MD <b>10763</b> Feet TVD		Cement Volume <b>734</b> Sacks	Cement Top <b>4962</b> Feet	Top Dakota Sand <b>5462</b> Feet
Base Last Charles Salt (If Applicable) <b>9228</b> Feet		NOTE: Intermediate or longstring casing string must be cemented above the top Dakota Group Sand.					
Proposed Logs <b>CBL/GR-TOC/GR-BSC</b>							
Drilling Mud Type (Vertical Hole - Below Surface Casing) <b>Invert</b>				Drilling Mud Type (Lateral) <b>Salt Water Gel</b>			
Survey Type in Vertical Portion of Well <b>MWD</b> Every 100 Feet		Survey Frequency: Build Section <b>30</b> Feet		Survey Frequency: Lateral <b>90</b> Feet		Survey Contractor <b>Ryan</b>	

NOTE: A Gamma Ray log must be run to ground surface and a CBL must be run on intermediate or longstring casing string if set.

Surveys are required at least every 30 feet in the build section and every 90 feet in the lateral section of a horizontal well. Measurement inaccuracies are not considered when determining compliance with the spacing/drilling unit boundary setback requirement except in the following scenarios: 1) When the angle between the well bore and the respective boundary is 10 degrees or less; or 2) If Industry standard methods and equipment are not utilized. Consult the applicable field order for exceptions.

If measurement inaccuracies are required to be considered, a 2° MWD measurement inaccuracy will be applied to the horizontal portion of the well bore. This measurement inaccuracy is applied to the well bore from KOP to TD.

**REQUIRED ATTACHMENTS:** Certified surveyor's plat, horizontal section plat, estimated geological tops, proposed mud/cementing plan, directional plot/plan, \$100 fee.

See Page 2 for Comments section and signature block.

**COMMENTS, ADDITIONAL INFORMATION, AND/OR LIST OF ATTACHMENTS****Email Attachments: Drill plan with drilling fluid data, Well Summary with Csg/Cmt design, Direct Plan/Plot, and Plats**

Lateral 2

KOP Lateral 2 Feet MD	Azimuth Lateral 2 °	Estimated Total Depth Lateral 2 Feet MD      Feet TVD			KOP Coordinates From Well Head From WH      From WH		
Formation Entry Point Coordinates From Well Head From WH		Bottom Hole Coordinates From Well Head From WH			From WH		
KOP Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	
Bottom Hole Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	

Lateral 3

KOP Lateral 3 Feet MD	Azimuth Lateral 3 °	Estimated Total Depth Lateral 3 Feet MD      Feet TVD			KOP Coordinates From Well Head From WH      From WH		
Formation Entry Point Coordinates From Well Head From WH		Bottom Hole Coordinates From Well Head From WH			From WH		
KOP Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	
Bottom Hole Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	

Lateral 4

KOP Lateral 4 Feet MD	Azimuth Lateral 4 °	Estimated Total Depth Lateral 4 Feet MD      Feet TVD			KOP Coordinates From Well Head From WH      From WH		
Formation Entry Point Coordinates From Well Head From WH		Bottom Hole Coordinates From Well Head From WH			From WH		
KOP Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	
Bottom Hole Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	

Lateral 5

KOP Lateral 5 Feet MD	Azimuth Lateral 5 °	Estimated Total Depth Lateral 5 Feet MD      Feet TVD			KOP Coordinates From Well Head From WH      From WH		
Formation Entry Point Coordinates From Well Head From WH		Bottom Hole Coordinates From Well Head From WH			From WH		
KOP Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	
Bottom Hole Footages From Nearest Section Line F      L		Qtr-Qtr	Section	Township <b>N</b>	Range <b>W</b>	County	

I hereby swear or affirm the information provided is true, complete and correct as determined from all available records.

Date

12 / 12 / 2011

ePermit

Printed Name  
Kaitlin Bass

Title

Operations Assitant

**FOR STATE USE ONLY**

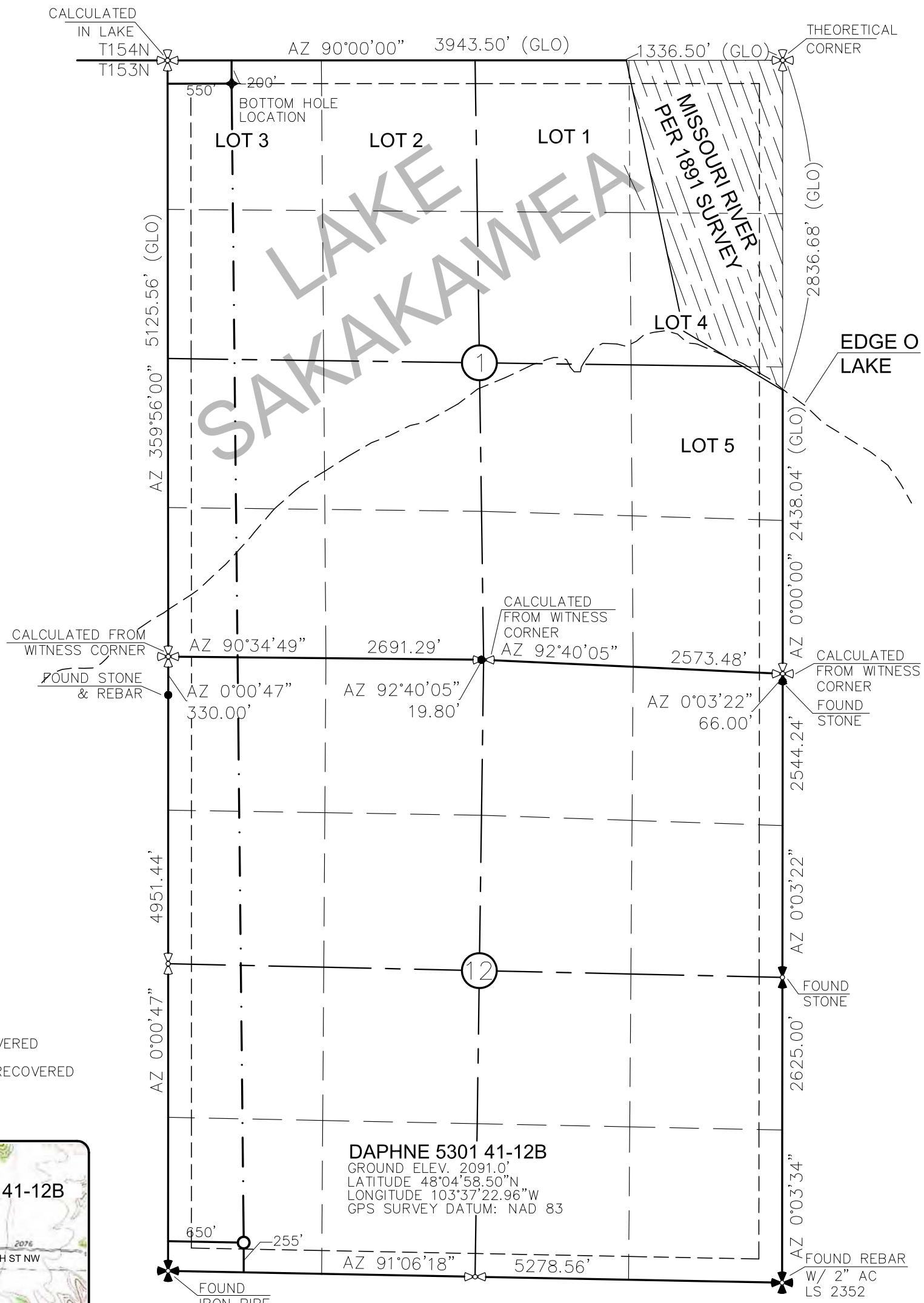
Permit and File Number <b>22099</b>	API Number <b>33 - 053 - 03911</b>
Field <b>BAKER</b>	
Pool <b>BAKKEN</b>	Permit Type <b>DEVELOPMENT</b>

**FOR STATE USE ONLY**

Date Approved <b>12 / 20 / 2011</b>
By <b>Todd L. Holweger</b>
Title <b>Mineral Resources Permit Manager</b>

**WELL LOCATION PLAT**  
OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"DAPHNE 5301 41-12B"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



© 2011, INTERSTATE ENGINEERING, INC.

1/8



Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.iengi.com](http://www.iengi.com)

Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
WELL LOCATION PLAT  
SECTION 12, T153N, R101W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S11-09-339  
Checked By: C.S.V. Date: NOV 2011

Revision No.	Date	By	Description
REV 1	12/6/11	JJS	MOVED BOTTOM HOLE

01/2011\STL-09-339 Oasis Petroleum 3 of 4 Wells Sec 1 12 13 & 24 T153N  
R101W\CAD\daphne.dwg - 12/19/2011 11:02 AM josh schmierer

**Oasis Petroleum  
Well Summary  
Daphne 5301 41-12B  
Section 12 T153N R101W  
McKenzie County, ND**

**SURFACE CASING AND CEMENT DESIGN**

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
9-5/8"	0' to 2,070'	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse	Burst	Tension	Cost per ft
		(psi) a	(psi) b	(1000 lbs) c	
0' to 2,070'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.08	3520 / 3.63	453 / 2.75	

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.0 ppg fluid on backside.
- b) Burst pressure based on 9 ppg fluid with no fluid on backside.
- c) Based on string weight in 9.0 ppg fluid at 2,070' TVD plus 100k# overpull.  
(Buoyed weight equals 64k lbs.)

Cement volumes are based on 9-5/8" casing set in 13-1/2" hole with 55% excess to circulate cement back to surface.  
Mix and pump the following slurry.

**Pre-flush (Spacer):      20 bbls** fresh water

**Lead Slurry:**      **443 sks** (234 bbls) 11.5 lb/gal VARICEM CEMENT with 0.25 lb/sk Poly-E-Flake (lost circulation additive)

**Tail Slurry:**      **200 sks** (72 bbls) 13 lb/gal VARICEM CEMENT with 0.25 lb/sk Poly-E-Flake (lost circulation additive)

**Oasis Petroleum  
Well Summary  
Daphne 5301 41-12B  
Section 12 T153N R101W  
McKenzie County, ND**

**INTERMEDIATE CASING AND CEMENT DESIGN**

**Intermediate Casing Design**

<b>Size</b>	<b>Interval</b>	<b>Weight</b>	<b>Grade</b>	<b>Coupling</b>	<b>I.D.</b>	<b>Drift</b>	<b>Make-up Torque (ft-lbs)</b>		
							<b>Minimum</b>	<b>Optimum</b>	<b>Max</b>
7"	0' – 6,750'	29	P-110	LTC	6.184"	6.059"	5,980	7,970	8,770
7"	6,750' – 10,322' (KOP)	32	HCP-110	LTC	6.094"	6.000***	6,730	8,970	9,870
7"	10,322' – 11,030'	29	P-110	LTC	6.184"	6.059"	5,980	7,970	8,770

\*\*Special Drift

<b>Interval</b>	<b>Length</b>	<b>Description</b>	<b>Collapse</b>	<b>Burst</b>	<b>Tension</b>
			(psi) a	(psi) b	(1000 lbs) c
0' – 6,750'	6,750'	7", 29#, P-110, LTC, 8rd	8,530 / 2.43*	11,220 / 1.19	797 / 2.09
6,750' – 10,322'	3,572'	7", 32#, HCP-110, LTC, 8rd	11,820 / 2.20*	12,460 / 1.29	
6,750' – 10,322'	3,572'	7", 32#, HCP-110, LTC, 8rd	11,820 / 1.23**	12,460 / 1.29	
10,322' – 11,030'	708'	7", 29 lb, P-110, LTC, 8rd	8,530 / 1.49*	11,220 / 1.15	

**API Rating & Safety Factor**

- a. \*Assume full casing evacuation with 10 ppg fluid on backside. \*\*Assume full casing evacuation with 1.2 psi/ft equivalent fluid gradient across salt intervals.
- b. Burst pressure based on 9,000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9.0 ppg fluid on backside—to 10,763' TVD.
- c. Based on string weight in 10 ppg fluid, (280k lbs buoyed weight) plus 100k lbs overpull.

Cement volumes are estimates based on 7" casing set in an 8-3/4" hole with 30% excess.

**Pre-flush (Spacer):**      **100 bbls** Saltwater  
**70 sks** Pozmix A  
**20 bbls** Fresh Water

**Lead Slurry:**      **110 sks** (50 bbls) 11.8 lb/gal ECONOCEM SYSTEM with 0.3% Fe-2 (additive material) and 0.25 lb/sk Poly-E-Flake (lost circulation additive)

**Primary Slurry:**      **349 sks** (86 bbls) 14 lb/gal EXTENDACEM SYSTEM with 0.6% HR-5 (retarder) and 0.25 lb/sk Poly-E-Flake (lost circulation additive)

**Tail Slurry:**      **275 sks** (77 bbls) 15.6 lb/gal HALCEM SYSTEM with 0.2% HR-5 (retarder), 0.25 lb/sk Poly-E-Flake (lost circulation additive) and 35% SSA-1 (additive material)

**Oasis Petroleum**  
**Well Summary**  
**Daphne 5301 41-12B**  
**Section 12 T153N R101W**  
**McKenzie County, ND**

**PRODUCTION LINER**

<b>Size</b>	<b>Interval</b>	<b>Weight</b>	<b>Grade</b>	<b>Coupling</b>	<b>I.D.</b>	<b>Drift</b>	<b>Make-up Torque (ft-lbs)</b>		
							<b>Minimum</b>	<b>Optimum</b>	<b>Max</b>
4-1/2"	10,275' to 20,529'	11.6	P-110	BTC	4.000"	3.875"			

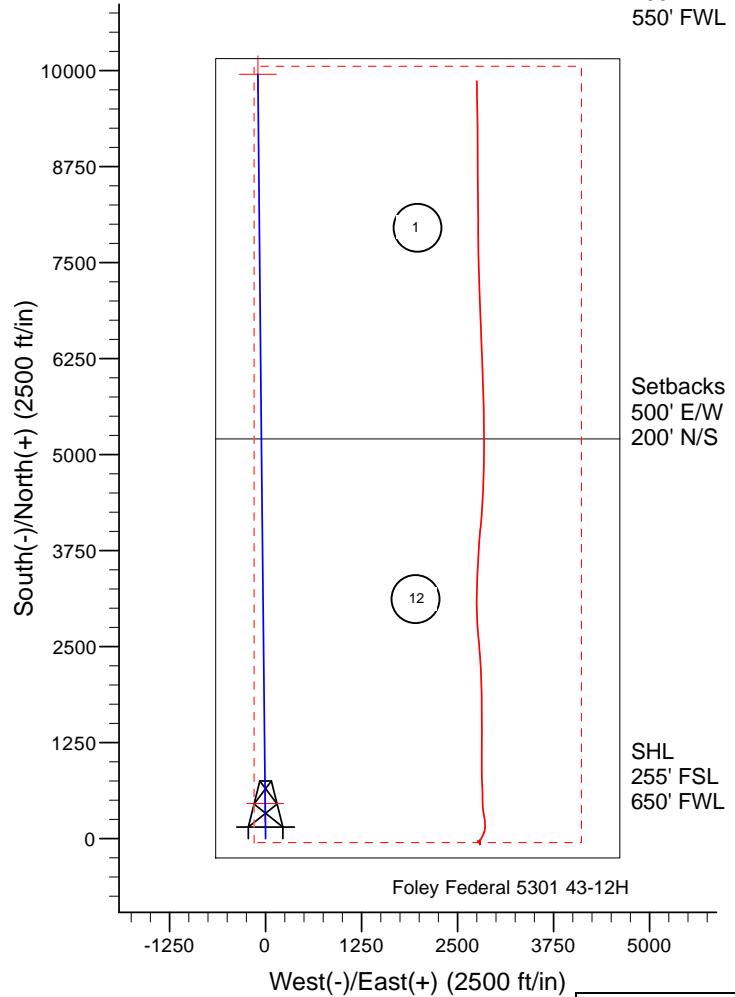
<b>Interval</b>	<b>Description</b>	<b>Collapse</b>	<b>Burst</b>	<b>Tension</b>	<b>Cost per ft</b>
		(psi) a	(psi) b	(1000 lbs) c	
10,275' to 20,529'	4-1/2", 11.6 lb, P-110, BTC	7,560 / 1.42	10,690 / 1.105	279 / 1.38	\$13.25

**API Rating & Safety Factor**

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10,763' TVD.
- b) Burst pressure based on 9,000 psi Stimulation pressure with 10.2 ppg internal fluid gradient with 9.0 ppg gradient on backside @ 10,763' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 102k lbs.) plus 100k lbs overpull.

DRILLING PLAN								
<b>PROSPECT/FIELD</b>	Indian Hills		<b>Horizontal Middle Bakken</b>		<b>COUNTY/STATE</b>	McKenzie Co., ND		
<b>OPERATOR</b>	Oasis Operating				<b>RIG</b>	Nabors 149		
<b>WELL NO.</b>	5301 41-12B				<b>LEASE</b>	Daphne		
<b>LOCATION</b>	SWSW 12-153N-101W		Surface Location (survey plat): 255' fsl		<b>650' fwl</b>			
<b>EST. T.D.</b>	20,524'				<b>GROUND ELEV:</b>	2094 Finished Pad Elev.		
	TOTAL LATERAL: 9,494' (est)				<b>KB ELEV:</b>	2119		
<b>PROGNOSIS:</b>	Based on 2,119' KB(est)		<b>LOGS:</b>	<b>Type</b>	<b>Interval</b>			
<b>MARKER</b>	<b>DEPTH (Surf Loc)</b>		<b>DATUM (Surf Loc)</b>		OH Logs: File to omit			
Pierre	NDIC MAP		1,969	150'	CBL/GR: Above top of cement/GR to base of casing			
Greenhorn		4,635	-2,516'	MWD GR: KOP to lateral TD				
Mowry		5,031	-2,912'					
Dakota		5,462	-3,343'					
Rierdon		6,378	-4,259'					
Dunham Salt		6,897	-4,778'	Surf: 3 deg. max., 1 deg / 100'; svry every 500'				
Dunham Salt Base		6,964	-4,845'	Prod: 5 deg. max., 1 deg / 100'; svry every 100'				
Spearfish		6,969	-4,850'					
Pine Salt		7,213	-5,094'					
Pine Salt Base		7,338	-5,219'					
Opeche Salt		7,366	-5,247'					
Opeche Salt Base		7,445	-5,326'					
Broom Creek (Top of Minnelusa Gp.)		7,626	-5,507'	<b>DST'S:</b> None planned				
Amsden		7,669	-5,550'					
Tyler		7,845	-5,726'					
Otter (Base of Minnelusa Gp.)		8,032	-5,913'					
Kibbey		8,381	-6,262'	<b>CORES:</b> None planned				
Charles Salt		8,528	-6,409'					
UB		9,151	-7,032'					
<b>Base Last Salt</b>		9,228	-7,109'					
Ratcliffe		9,276	-7,157'					
Mission Canyon		9,452	-7,333'	<b>MUDLOGGING:</b>				
Lodgepole		10,026	-7,907'	Two-Man: 8,328'				
False Bakken		10,741	-8,613'	~200' above the Charles (Kibbey) to Casing point; Casing point to TD				
Upper Bakken		10,756	-8,622'					
Middle Bakken		10,756	-8,637'	30' samples at direction of wellsite geologist; 10' through target @ curve land				
<b>Middle Bakken Sand Target</b>		10,763	-8,644'					
<b>Base Middle Bakken Sand Target</b>		10,772	-8,653'					
Lower Bakken		10,792	-8,673'					
Three Forks		10,819	-8,700'	<b>BOP:</b> 11" 5000 psi blind, pipe & annular				
Dip Rate:	<b>-0.2° or .35' /100' up</b>							
<b>Max. Anticipated BHP:</b>	<b>4674</b>		<b>Surface Formation: Glacial till</b>					
<b>MUD:</b>	<b>Interval</b>	<b>Type</b>	<b>WT</b>	<b>Vis</b>	<b>WL</b>	<b>Remarks</b>		
Surface	0' -	2,070'	FW/Gel - Lime Sweeps	8.6 - 8.9	28-34	NC		
Intermediate	2,070' -	11,030'	Invert	9.6-10.4	40-60	30+(HpHt)		
Liner	11,030' -	20,524'	Salt Water	9.3-10.4	28-34	NC		
<b>CASING:</b>	<b>Size</b>	<b>Wt pfp</b>	<b>Hole</b>	<b>Depth</b>	<b>Cement</b>	<b>WOC</b>	<b>Remarks</b>	
Surface:	9-5/8"	36#	13-1/2"	2,070'	To Surface	12	100' into Pierre	
Intermediate:	7"	29/32#	8-3/4"	11,030'	4962	24	500' above Dakota	
Production:	4.5"	11.6#	6"	20,524'	<b>TOL @ 10,275'</b>		50' above KOP	
Production Liner:								
<b>PROBABLE PLUGS, IF REQ'D:</b>								
<b>OTHER:</b>	<b>MD</b>	<b>TVD</b>	<b>FNL/FSL</b>	<b>FEL/FWL</b>	<b>S-T-R</b>	<b>AZI</b>		
Surface:	<b>2,070'</b>	<b>2,070'</b>	<b>255' FSL</b>	<b>650' FWL</b>	<b>12-T153N-R101W</b>		Survey Company:	
KOP:	<b>10,322'</b>	<b>10,322'</b>	<b>255' FSL</b>	<b>650' FWL</b>	<b>12-T153N-R101W</b>		Build Rate: <b>13 deg /100'</b>	
EOC	<b>11,016'</b>	<b>10,763'</b>	<b>697' FSL</b>	<b>646' FWL</b>	<b>12-T153N-R101W</b>	<b>359.4</b>		
Casing Point:	<b>11,030'</b>	<b>10,763'</b>	<b>711' FSL</b>	<b>645' FWL</b>	<b>12-T153N-R101W</b>	<b>359.4</b>		
Middle Bakken Lateral TD:	<b>20,524'</b>	<b>10,729'</b>	<b>200'FNL</b>	<b>550' FWL</b>	<b>1-T153N-R101W</b>	<b>359.4</b>		
<b>Comments:</b>								
DRILL TO KOP AND LOG. DRILL CURVE TO 90 DEG AND 7" CASING POINT SET 7" CASING. DRILL MIDDLE BAKKEN LATERAL. MWD Surveys will be taken every 100' in vertical hole, and a minimum of every 30' while building curve and every 90' while drilling lateral. MWD GR to be run from KOP to Lateral TD. <b>GR must be run to ground surface.</b>								
<b>Geology:</b> MRB 12-8-2011	Prepared by:		Engineering: L. Strong 12/12/2011					

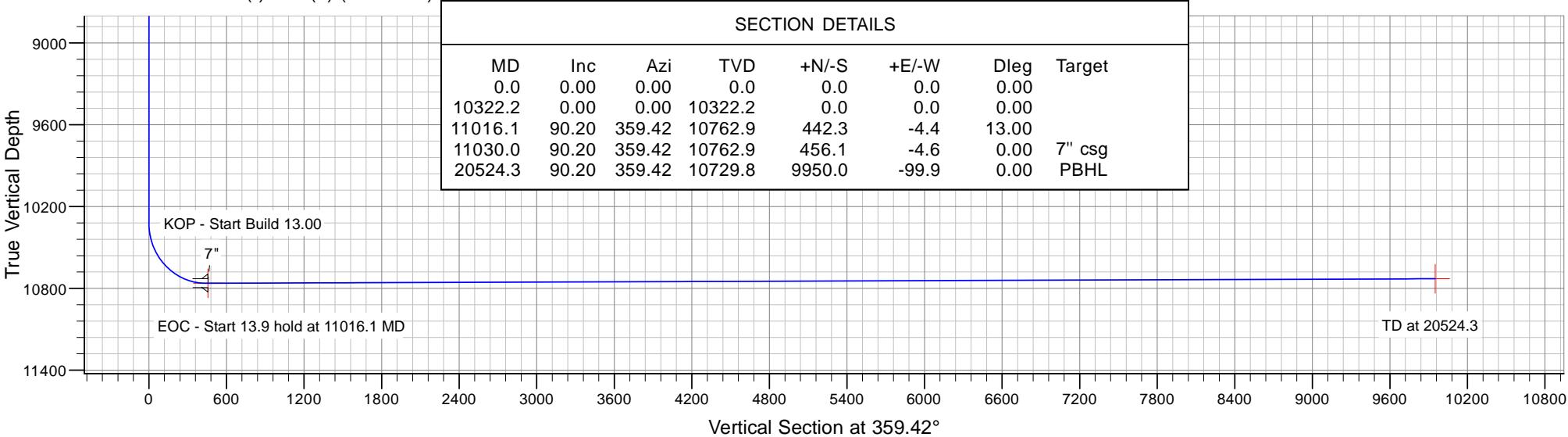
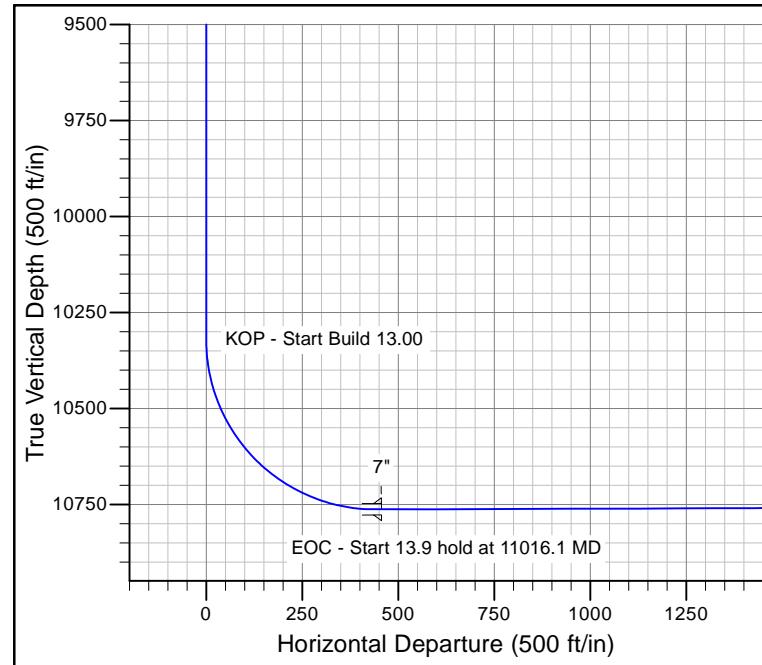
PBHL  
200' FNL  
550' FWL



Project: Indian Hills  
Site: 153N-101W-1/12  
Well: Daphne 5301 41-12B  
Wellbore: OH  
Design: Plan #1

T M Azimuths to True North  
Magnetic North: 8.57°  
Magnetic Field  
Strength: 56724.0snT  
Dip Angle: 73.09°  
Date: 12/8/2011  
Model: IGRF200510

CASING DETAILS				
TVD	MD	Name	Size	
2070.0	2070.0	9 5/8"	9.625	
10762.9	11030.0	7"	7.000	



SITE DETAILS: 153N-101W-1/12

Site Centre Latitude: 48° 4' 57.940 N  
Longitude: 103° 36' 41.780 W

Positional Uncertainty: 0.0  
Convergence: -2.32  
Local North: True

# **Oasis**

**Indian Hills  
153N-101W-1/12  
Daphne 5301 41-12B**

**OH**

**Plan: Plan #1**

# **Standard Planning Report**

**19 December, 2011**

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	Indian Hills		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	North Dakota Northern Zone		

<b>Site</b>	153N-101W-1/12		
<b>Site Position:</b>		<b>Northing:</b>	125,065.82 m
<b>From:</b>	Lat/Long	<b>Easting:</b>	368,244.93 m
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in

<b>Well</b>	Daphne 5301 41-12B				
<b>Well Position</b>	+N/-S +E/-W	56.9 ft -2,796.0 ft	<b>Northing:</b> <b>Easting:</b>	125,117.59 m 367,394.12 m	<b>Latitude:</b> <b>Longitude:</b>
		0.0 ft	<b>Wellhead Elevation:</b>		<b>Grid Convergence:</b>
					48° 4' 57.940 N 103° 36' 41.780 W -2.32 °

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b> (°)	<b>Dip Angle</b> (°)	<b>Field Strength</b> (nT)
	IGRF200510	12/8/2011	8.57	73.09	56,724

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>		<b>PROTOTYPE</b>	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b> (ft)		<b>+N/-S</b> (ft)	<b>+E/-W</b> (ft)	<b>Direction</b> (°)
	0.0		0.0	0.0	359.42

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
10,322.2	0.00	0.00	10,322.2	0.0	0.0	0.00	0.00	0.00	0.00	0.00
11,016.1	90.20	359.42	10,762.9	442.3	-4.4	13.00	13.00	0.00	359.42	
11,030.0	90.20	359.42	10,762.9	456.1	-4.6	0.00	0.00	0.00	0.00	Interp @ 10763.0 (Da
20,524.3	90.20	359.42	10,729.8	9,950.0	-99.9	0.00	0.00	0.00	0.00	Daphne 5301 41-12B

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,969.0	0.00	0.00	1,969.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pierre</b>									
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,070.0	0.00	0.00	2,070.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>9 5/8"</b>									
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,635.0	0.00	0.00	4,635.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Greenhorn</b>									

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,031.0	0.00	0.00	5,031.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Mowry</b>									
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,462.0	0.00	0.00	5,462.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dakota</b>									
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,378.0	0.00	0.00	6,378.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Rierdon</b>									
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,897.0	0.00	0.00	6,897.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dunham Salt</b>									
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,964.0	0.00	0.00	6,964.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Dunham Salt Base</b>									
6,969.0	0.00	0.00	6,969.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Spearfish</b>									
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,213.0	0.00	0.00	7,213.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pine Salt</b>									
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,338.0	0.00	0.00	7,338.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Pine Salt Base</b>									
7,366.0	0.00	0.00	7,366.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Opeche Salt</b>									
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,445.0	0.00	0.00	7,445.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Opeche Salt Base</b>									
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,626.0	0.00	0.00	7,626.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Broom Creek (Top of Minnelusa Gp.)</b>									
7,669.0	0.00	0.00	7,669.0	0.0	0.0	0.0	0.00	0.00	0.00

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
<b>Amunden</b>									
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,845.0	0.00	0.00	7,845.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Tyler</b>									
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,032.0	0.00	0.00	8,032.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Otter (Base of Minnelusa Gp.)</b>									
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,381.0	0.00	0.00	8,381.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Kibbey</b>									
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,528.0	0.00	0.00	8,528.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Charles Salt</b>									
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,151.0	0.00	0.00	9,151.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>UB</b>									
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,228.0	0.00	0.00	9,228.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Base Last Salt</b>									
9,276.0	0.00	0.00	9,276.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Ratcliffe</b>									
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,452.0	0.00	0.00	9,452.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Mission Canyon</b>									
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,026.0	0.00	0.00	10,026.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Lodgepole</b>									
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
10,322.2	0.00	0.00	10,322.2	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP - Start Build 13.00</b>									
10,325.0	0.36	359.42	10,325.0	0.0	0.0	0.0	13.00	13.00	0.00
10,350.0	3.61	359.42	10,350.0	0.9	0.0	0.9	13.00	13.00	0.00
10,375.0	6.86	359.42	10,374.9	3.2	0.0	3.2	13.00	13.00	0.00
10,400.0	10.11	359.42	10,399.6	6.8	-0.1	6.8	13.00	13.00	0.00
10,425.0	13.36	359.42	10,424.1	11.9	-0.1	11.9	13.00	13.00	0.00

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,450.0	16.61	359.42	10,448.2	18.4	-0.2	18.4	13.00	13.00	0.00
10,475.0	19.86	359.42	10,472.0	26.2	-0.3	26.2	13.00	13.00	0.00
10,500.0	23.11	359.42	10,495.2	35.4	-0.4	35.4	13.00	13.00	0.00
10,525.0	26.36	359.42	10,517.9	45.8	-0.5	45.8	13.00	13.00	0.00
10,550.0	29.61	359.42	10,540.0	57.6	-0.6	57.6	13.00	13.00	0.00
10,575.0	32.86	359.42	10,561.4	70.5	-0.7	70.5	13.00	13.00	0.00
10,600.0	36.11	359.42	10,582.0	84.7	-0.9	84.7	13.00	13.00	0.00
10,625.0	39.36	359.42	10,601.7	100.0	-1.0	100.0	13.00	13.00	0.00
10,650.0	42.61	359.42	10,620.6	116.4	-1.2	116.4	13.00	13.00	0.00
10,675.0	45.86	359.42	10,638.5	133.8	-1.3	133.8	13.00	13.00	0.00
10,700.0	49.11	359.42	10,655.4	152.2	-1.5	152.2	13.00	13.00	0.00
10,725.0	52.36	359.42	10,671.2	171.6	-1.7	171.6	13.00	13.00	0.00
10,750.0	55.61	359.42	10,685.9	191.8	-1.9	191.8	13.00	13.00	0.00
10,775.0	58.86	359.42	10,699.5	212.8	-2.1	212.8	13.00	13.00	0.00
10,800.0	62.11	359.42	10,711.8	234.6	-2.4	234.6	13.00	13.00	0.00
10,825.0	65.36	359.42	10,722.8	257.0	-2.6	257.0	13.00	13.00	0.00
10,850.0	68.61	359.42	10,732.6	280.0	-2.8	280.0	13.00	13.00	0.00
10,874.8	71.84	359.42	10,741.0	303.4	-3.0	303.4	13.00	13.00	0.00
<b>False Bakken</b>									
10,875.0	71.86	359.42	10,741.1	303.5	-3.0	303.5	13.00	13.00	0.00
10,900.0	75.11	359.42	10,748.2	327.5	-3.3	327.5	13.00	13.00	0.00
10,925.0	78.36	359.42	10,753.9	351.8	-3.5	351.8	13.00	13.00	0.00
10,936.1	79.81	359.42	10,756.0	362.8	-3.6	362.8	13.00	13.00	0.00
<b>Upper Bakken - Middle Bakken</b>									
10,950.0	81.61	359.42	10,758.2	376.4	-3.8	376.4	13.00	13.00	0.00
10,975.0	84.86	359.42	10,761.2	401.2	-4.0	401.3	13.00	13.00	0.00
11,000.0	88.11	359.42	10,762.7	426.2	-4.3	426.2	13.00	13.00	0.00
11,016.1	90.20	359.42	10,762.9	442.3	-4.4	442.3	13.00	13.00	0.00
<b>EOC - Start 13.9 hold at 11016.1 MD</b>									
11,030.0	90.20	359.42	10,762.9	456.2	-4.6	456.2	0.00	0.00	0.00
<b>Start 9494.4 hold at 11030.0 MD - 7"</b>									
11,100.0	90.20	359.42	10,762.7	526.2	-5.3	526.2	0.00	0.00	0.00
11,200.0	90.20	359.42	10,762.3	626.2	-6.3	626.2	0.00	0.00	0.00
11,300.0	90.20	359.42	10,762.0	726.2	-7.3	726.2	0.00	0.00	0.00
11,400.0	90.20	359.42	10,761.6	826.2	-8.3	826.2	0.00	0.00	0.00
11,500.0	90.20	359.42	10,761.3	926.2	-9.3	926.2	0.00	0.00	0.00
11,600.0	90.20	359.42	10,760.9	1,026.2	-10.3	1,026.2	0.00	0.00	0.00
11,700.0	90.20	359.42	10,760.6	1,126.2	-11.3	1,126.2	0.00	0.00	0.00
11,800.0	90.20	359.42	10,760.2	1,226.1	-12.3	1,226.2	0.00	0.00	0.00
11,900.0	90.20	359.42	10,759.9	1,326.1	-13.3	1,326.2	0.00	0.00	0.00
12,000.0	90.20	359.42	10,759.5	1,426.1	-14.3	1,426.2	0.00	0.00	0.00
12,100.0	90.20	359.42	10,759.2	1,526.1	-15.3	1,526.2	0.00	0.00	0.00
12,200.0	90.20	359.42	10,758.8	1,626.1	-16.3	1,626.2	0.00	0.00	0.00
12,300.0	90.20	359.42	10,758.5	1,726.1	-17.3	1,726.2	0.00	0.00	0.00
12,400.0	90.20	359.42	10,758.1	1,826.1	-18.3	1,826.2	0.00	0.00	0.00
12,500.0	90.20	359.42	10,757.8	1,926.1	-19.3	1,926.2	0.00	0.00	0.00
12,600.0	90.20	359.42	10,757.4	2,026.1	-20.4	2,026.2	0.00	0.00	0.00
12,700.0	90.20	359.42	10,757.1	2,126.1	-21.4	2,126.2	0.00	0.00	0.00
12,800.0	90.20	359.42	10,756.7	2,226.1	-22.4	2,226.2	0.00	0.00	0.00
12,900.0	90.20	359.42	10,756.4	2,326.1	-23.4	2,326.2	0.00	0.00	0.00
13,000.0	90.20	359.42	10,756.0	2,426.1	-24.4	2,426.2	0.00	0.00	0.00
13,100.0	90.20	359.42	10,755.7	2,526.1	-25.4	2,526.2	0.00	0.00	0.00
13,200.0	90.20	359.42	10,755.3	2,626.1	-26.4	2,626.2	0.00	0.00	0.00

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,300.0	90.20	359.42	10,755.0	2,726.1	-27.4	2,726.2	0.00	0.00	0.00
13,400.0	90.20	359.42	10,754.6	2,826.1	-28.4	2,826.2	0.00	0.00	0.00
13,500.0	90.20	359.42	10,754.3	2,926.1	-29.4	2,926.2	0.00	0.00	0.00
13,600.0	90.20	359.42	10,753.9	3,026.0	-30.4	3,026.2	0.00	0.00	0.00
13,700.0	90.20	359.42	10,753.6	3,126.0	-31.4	3,126.2	0.00	0.00	0.00
13,800.0	90.20	359.42	10,753.2	3,226.0	-32.4	3,226.2	0.00	0.00	0.00
13,900.0	90.20	359.42	10,752.9	3,326.0	-33.4	3,326.2	0.00	0.00	0.00
14,000.0	90.20	359.42	10,752.5	3,426.0	-34.4	3,426.2	0.00	0.00	0.00
14,100.0	90.20	359.42	10,752.2	3,526.0	-35.4	3,526.2	0.00	0.00	0.00
14,200.0	90.20	359.42	10,751.8	3,626.0	-36.4	3,626.2	0.00	0.00	0.00
14,300.0	90.20	359.42	10,751.5	3,726.0	-37.4	3,726.2	0.00	0.00	0.00
14,400.0	90.20	359.42	10,751.1	3,826.0	-38.4	3,826.2	0.00	0.00	0.00
14,500.0	90.20	359.42	10,750.8	3,926.0	-39.4	3,926.2	0.00	0.00	0.00
14,600.0	90.20	359.42	10,750.4	4,026.0	-40.4	4,026.2	0.00	0.00	0.00
14,700.0	90.20	359.42	10,750.1	4,126.0	-41.4	4,126.2	0.00	0.00	0.00
14,800.0	90.20	359.42	10,749.7	4,226.0	-42.5	4,226.2	0.00	0.00	0.00
14,900.0	90.20	359.42	10,749.4	4,326.0	-43.5	4,326.2	0.00	0.00	0.00
15,000.0	90.20	359.42	10,749.0	4,426.0	-44.5	4,426.2	0.00	0.00	0.00
15,100.0	90.20	359.42	10,748.7	4,526.0	-45.5	4,526.2	0.00	0.00	0.00
15,200.0	90.20	359.42	10,748.3	4,626.0	-46.5	4,626.2	0.00	0.00	0.00
15,300.0	90.20	359.42	10,748.0	4,726.0	-47.5	4,726.2	0.00	0.00	0.00
15,400.0	90.20	359.42	10,747.6	4,825.9	-48.5	4,826.2	0.00	0.00	0.00
15,500.0	90.20	359.42	10,747.3	4,925.9	-49.5	4,926.2	0.00	0.00	0.00
15,600.0	90.20	359.42	10,746.9	5,025.9	-50.5	5,026.2	0.00	0.00	0.00
15,700.0	90.20	359.42	10,746.6	5,125.9	-51.5	5,126.2	0.00	0.00	0.00
15,800.0	90.20	359.42	10,746.2	5,225.9	-52.5	5,226.2	0.00	0.00	0.00
15,900.0	90.20	359.42	10,745.9	5,325.9	-53.5	5,326.2	0.00	0.00	0.00
16,000.0	90.20	359.42	10,745.6	5,425.9	-54.5	5,426.2	0.00	0.00	0.00
16,100.0	90.20	359.42	10,745.2	5,525.9	-55.5	5,526.2	0.00	0.00	0.00
16,200.0	90.20	359.42	10,744.9	5,625.9	-56.5	5,626.2	0.00	0.00	0.00
16,300.0	90.20	359.42	10,744.5	5,725.9	-57.5	5,726.2	0.00	0.00	0.00
16,400.0	90.20	359.42	10,744.2	5,825.9	-58.5	5,826.2	0.00	0.00	0.00
16,500.0	90.20	359.42	10,743.8	5,925.9	-59.5	5,926.2	0.00	0.00	0.00
16,600.0	90.20	359.42	10,743.5	6,025.9	-60.5	6,026.2	0.00	0.00	0.00
16,700.0	90.20	359.42	10,743.1	6,125.9	-61.5	6,126.2	0.00	0.00	0.00
16,800.0	90.20	359.42	10,742.8	6,225.9	-62.5	6,226.2	0.00	0.00	0.00
16,900.0	90.20	359.42	10,742.4	6,325.9	-63.5	6,326.2	0.00	0.00	0.00
17,000.0	90.20	359.42	10,742.1	6,425.9	-64.5	6,426.2	0.00	0.00	0.00
17,100.0	90.20	359.42	10,741.7	6,525.8	-65.6	6,526.2	0.00	0.00	0.00
17,200.0	90.20	359.42	10,741.4	6,625.8	-66.6	6,626.2	0.00	0.00	0.00
17,300.0	90.20	359.42	10,741.0	6,725.8	-67.6	6,726.2	0.00	0.00	0.00
17,400.0	90.20	359.42	10,740.7	6,825.8	-68.6	6,826.2	0.00	0.00	0.00
17,500.0	90.20	359.42	10,740.3	6,925.8	-69.6	6,926.2	0.00	0.00	0.00
17,600.0	90.20	359.42	10,740.0	7,025.8	-70.6	7,026.2	0.00	0.00	0.00
17,700.0	90.20	359.42	10,739.6	7,125.8	-71.6	7,126.2	0.00	0.00	0.00
17,800.0	90.20	359.42	10,739.3	7,225.8	-72.6	7,226.2	0.00	0.00	0.00
17,900.0	90.20	359.42	10,738.9	7,325.8	-73.6	7,326.2	0.00	0.00	0.00
18,000.0	90.20	359.42	10,738.6	7,425.8	-74.6	7,426.2	0.00	0.00	0.00
18,100.0	90.20	359.42	10,738.2	7,525.8	-75.6	7,526.2	0.00	0.00	0.00
18,200.0	90.20	359.42	10,737.9	7,625.8	-76.6	7,626.2	0.00	0.00	0.00
18,300.0	90.20	359.42	10,737.5	7,725.8	-77.6	7,726.2	0.00	0.00	0.00
18,400.0	90.20	359.42	10,737.2	7,825.8	-78.6	7,826.2	0.00	0.00	0.00
18,500.0	90.20	359.42	10,736.8	7,925.8	-79.6	7,926.2	0.00	0.00	0.00
18,600.0	90.20	359.42	10,736.5	8,025.8	-80.6	8,026.2	0.00	0.00	0.00

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
18,700.0	90.20	359.42	10,736.1	8,125.8	-81.6	8,126.2	0.00	0.00	0.00
18,800.0	90.20	359.42	10,735.8	8,225.8	-82.6	8,226.2	0.00	0.00	0.00
18,900.0	90.20	359.42	10,735.4	8,325.7	-83.6	8,326.2	0.00	0.00	0.00
19,000.0	90.20	359.42	10,735.1	8,425.7	-84.6	8,426.2	0.00	0.00	0.00
19,100.0	90.20	359.42	10,734.7	8,525.7	-85.6	8,526.2	0.00	0.00	0.00
19,200.0	90.20	359.42	10,734.4	8,625.7	-86.6	8,626.2	0.00	0.00	0.00
19,300.0	90.20	359.42	10,734.0	8,725.7	-87.7	8,726.2	0.00	0.00	0.00
19,400.0	90.20	359.42	10,733.7	8,825.7	-88.7	8,826.2	0.00	0.00	0.00
19,500.0	90.20	359.42	10,733.3	8,925.7	-89.7	8,926.2	0.00	0.00	0.00
19,600.0	90.20	359.42	10,733.0	9,025.7	-90.7	9,026.2	0.00	0.00	0.00
19,700.0	90.20	359.42	10,732.6	9,125.7	-91.7	9,126.2	0.00	0.00	0.00
19,800.0	90.20	359.42	10,732.3	9,225.7	-92.7	9,226.2	0.00	0.00	0.00
19,900.0	90.20	359.42	10,731.9	9,325.7	-93.7	9,326.2	0.00	0.00	0.00
20,000.0	90.20	359.42	10,731.6	9,425.7	-94.7	9,426.2	0.00	0.00	0.00
20,100.0	90.20	359.42	10,731.2	9,525.7	-95.7	9,526.2	0.00	0.00	0.00
20,200.0	90.20	359.42	10,730.9	9,625.7	-96.7	9,626.2	0.00	0.00	0.00
20,300.0	90.20	359.42	10,730.5	9,725.7	-97.7	9,726.2	0.00	0.00	0.00
20,400.0	90.20	359.42	10,730.2	9,825.7	-98.7	9,826.2	0.00	0.00	0.00
20,500.0	90.20	359.42	10,729.8	9,925.7	-99.7	9,926.2	0.00	0.00	0.00
20,524.3	90.20	359.42	10,729.8	9,950.0	-99.9	9,950.5	0.00	0.00	0.00
<b>TD at 20524.3</b>									

Design Targets										
Target Name		Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
- hit/miss target										
- Shape		(°)	(°)	(ft)	(ft)	(ft)	(m)	(m)		
Daphne 5301 41-12B PE		0.00	0.00	10,729.7	9,950.0	-100.0	128,149.09	367,486.65	48° 6' 36.696 N	103° 37' 24.434 W
- plan misses target center by 0.1ft at 20524.3ft MD (10729.8 TVD, 9950.0 N, -99.9 E)										
- Point										
Interp @ 10763.0 (Daphne 5301 41-12B)		0.00	0.00	10,762.9	456.1	-4.6	125,256.57	367,398.37	48° 5' 3.002 N	103° 37' 23.027 W
- plan hits target center										
- Point										

Casing Points									
Measured Depth (ft)	Vertical Depth (ft)	Name				Casing Diameter (in)	Hole Diameter (in)		
2,070.0	2,070.0	9 5/8"				9.625	13.500		
11,030.0	10,762.9	7"				7.000	8.750		

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.1.9.0 Production DB	<b>Local Co-ordinate Reference:</b>	Well Daphne 5301 41-12B
<b>Company:</b>	Oasis	<b>TVD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Project:</b>	Indian Hills	<b>MD Reference:</b>	WELL @ 2119.0ft (Original Well Elev)
<b>Site:</b>	153N-101W-1/12	<b>North Reference:</b>	True
<b>Well:</b>	Daphne 5301 41-12B	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

**Formations**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,969.0	1,969.0	Pierre			
4,635.0	4,635.0	Greenhorn			
5,031.0	5,031.0	Mowry			
5,462.0	5,462.0	Dakota			
6,378.0	6,378.0	Rierdon			
6,897.0	6,897.0	Dunham Salt			
6,964.0	6,964.0	Dunham Salt Base			
6,969.0	6,969.0	Spearfish			
7,213.0	7,213.0	Pine Salt			
7,338.0	7,338.0	Pine Salt Base			
7,366.0	7,366.0	Opeche Salt			
7,445.0	7,445.0	Opeche Salt Base			
7,626.0	7,626.0	Broom Creek (Top of Minnelusa Gp.)			
7,669.0	7,669.0	Amsden			
7,845.0	7,845.0	Tyler			
8,032.0	8,032.0	Otter (Base of Minnelusa Gp.)			
8,381.0	8,381.0	Kibbey			
8,528.0	8,528.0	Charles Salt			
9,151.0	9,151.0	UB			
9,228.0	9,228.0	Base Last Salt			
9,276.0	9,276.0	Ratcliffe			
9,452.0	9,452.0	Mission Canyon			
10,026.0	10,026.0	Lodgepole			
10,874.8	10,741.0	False Bakken			
10,936.1	10,756.0	Upper Bakken			
10,936.1	10,756.0	Middle Bakken		0.00	

**Plan Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			Comment
		+N/S (ft)	+E/W (ft)		
10,322.2	10,322.2	0.0	0.0	KOP - Start Build 13.00	
11,016.1	10,762.9	442.3	-4.4	EOC - Start 13.9 hold at 11016.1 MD	
11,030.0	10,762.9	456.1	-4.6	Start 9494.4 hold at 11030.0 MD	
20,524.3	10,729.8	9,950.0	-99.9	TD at 20524.3	

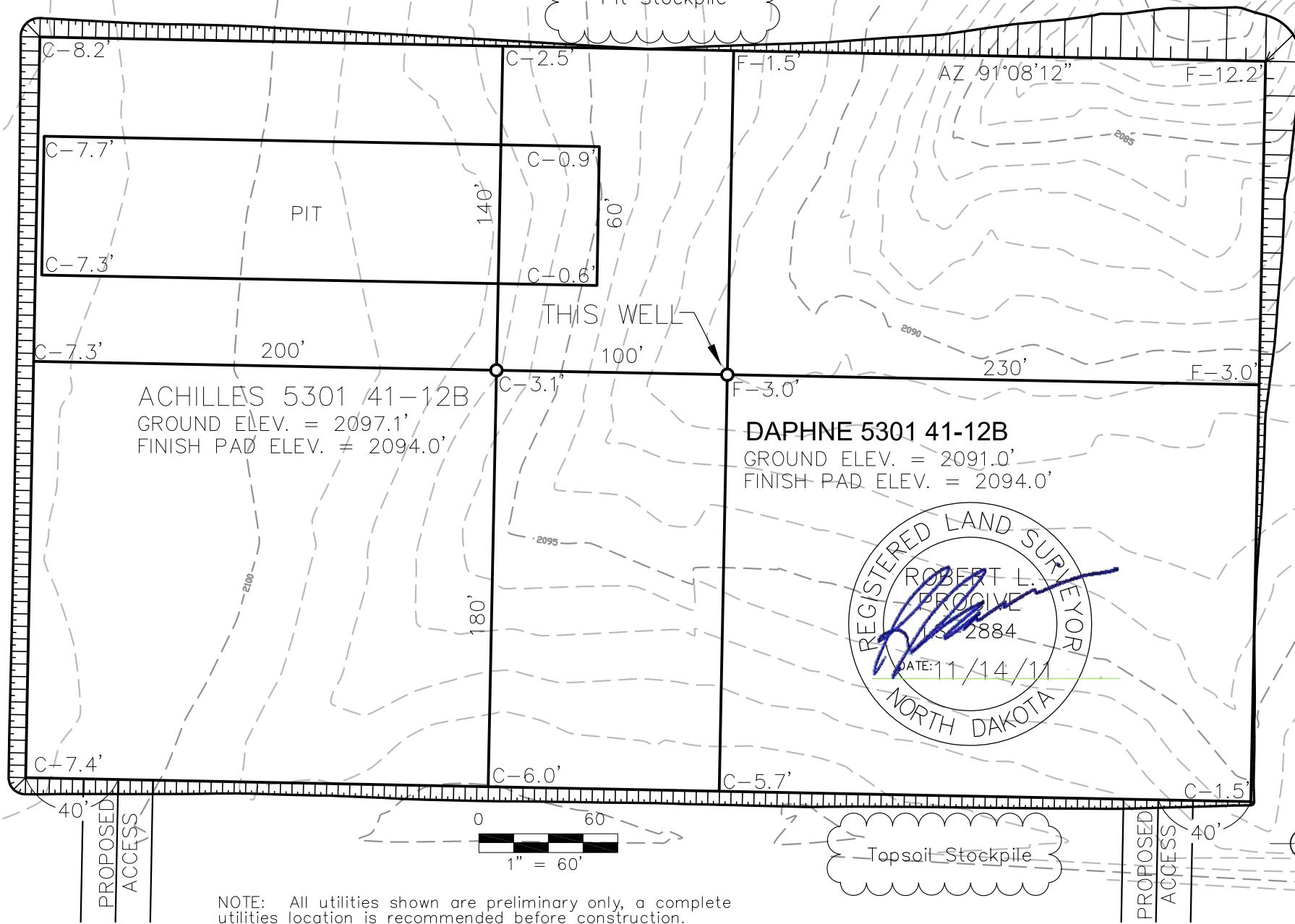


# PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"DAPHNE 5301 41-12B"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

Pit Stockpile



© 2011, INTERSTATE ENGINEERING, INC.



3/8

SHEET NO.

Floodplain No.	Date	By	Description
REV 1	12/13/11	JJS	CHANGED TO DOUBLE PAD

OASIS PETROLEUM NORTH AMERICA, LLC	PAD LAYOUT	Project No.: S-1162-30
SECTION 12, T153N, R101W		Date: NOV 2011
MCKENZIE COUNTY, NORTH DAKOTA		
Drawn By: _____	U.S.	Checked By: _____

Interstate Engineering, Inc.  
P.O. Box 6468  
425 East Main Street  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax. (406) 433-5618  
[www.ienoi.com](http://www.ienoi.com)  
Other offices in Minnesota, North Dakota and South Dakota

## WELL LOCATION SITE QUANTITIES

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"DAPHNE 5301 41-12B"

DA TINE 330147-12  
255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

WELL SITE ELEVATION	2091.0
WELL PAD ELEVATION	2094.0
EXCAVATION	17,665
PLUS PIT	<u>3,150</u>
	20,815
EMBANKMENT	9,610
PLUS SHRINKAGE (30%)	<u>2,883</u>
	12,493
STOCKPILE PIT	3,150
STOCKPILE TOP SOIL (6")	3,350
STOCKPILE FROM PAD	1,822
DISTURBED AREA FROM PAD	4.15 ACRES

**NOTE: ALL QUANTITIES ARE IN CUBIC YARDS (UNLESS NOTED)**

CUT END SLOPES AT 1:1

## FILL END SLOPES AT 1:5:1

## WELL SITE LOCATION

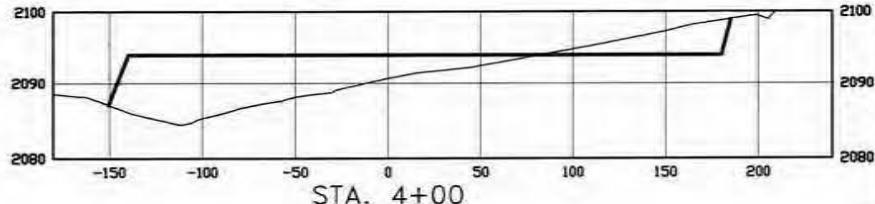
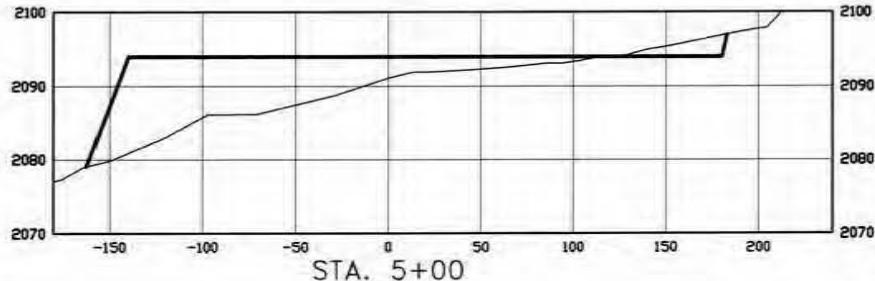
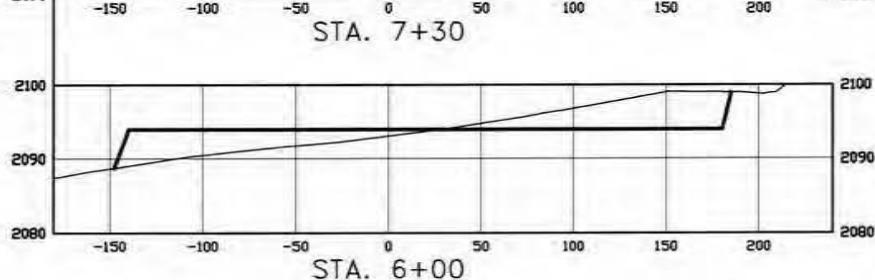
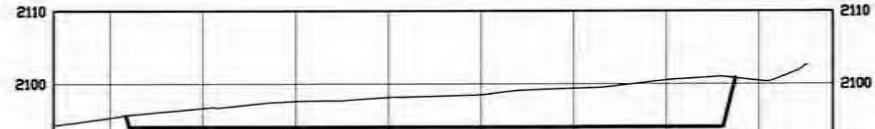
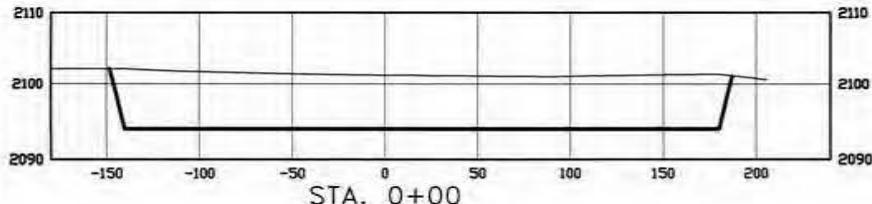
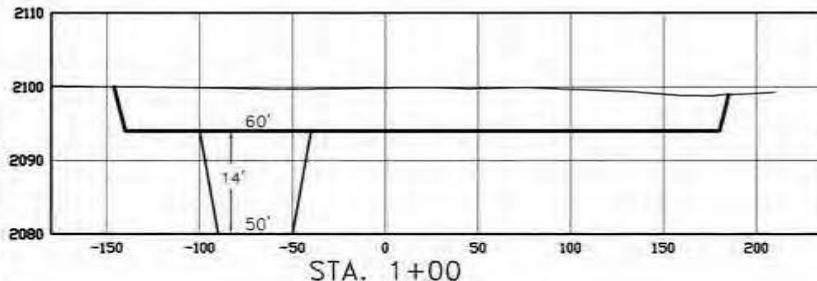
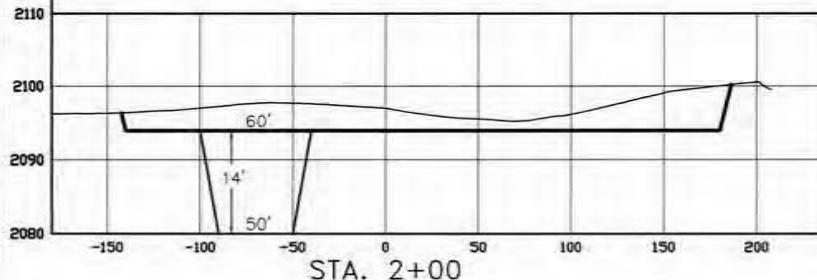
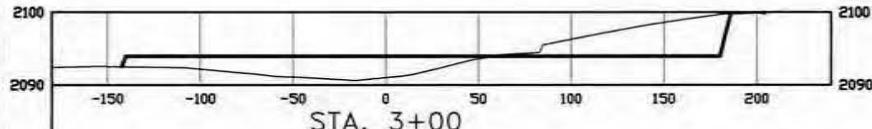
650' FWI

255' FSL

# CROSS SECTIONS

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
"DAPHNE 5301 41-12B"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



SCALE  
HORIZ 1'=100'  
VERT 1'=20'

© 2011, INTERSTATE ENGINEERING, INC.

**7/8**



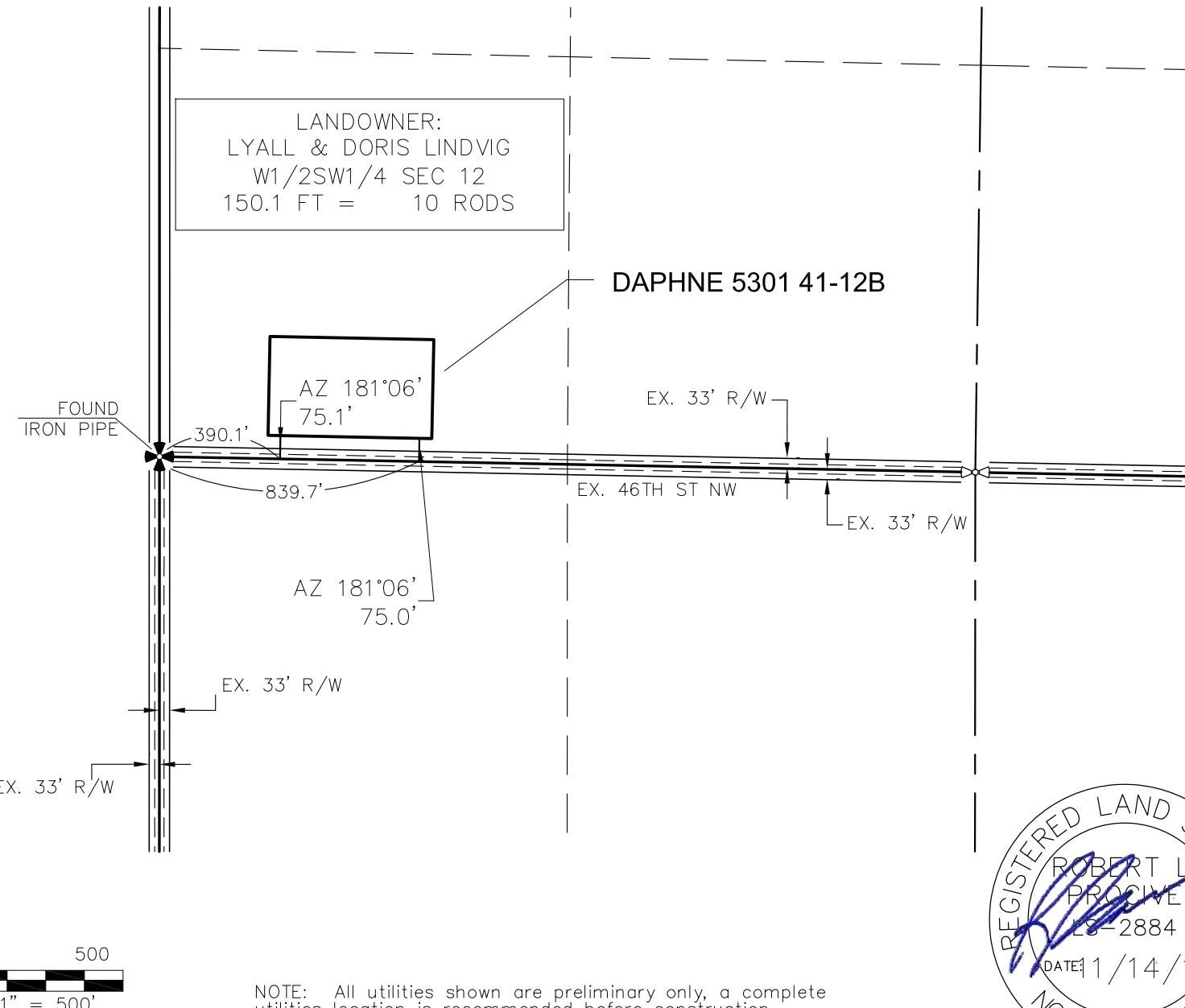
INTERSTATE  
ENGINEERING

Professionals you need, people you trust!  
Other offices in Montana, North Dakota and South Dakota

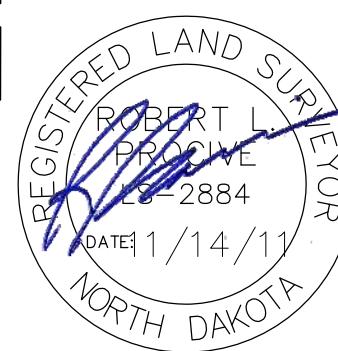
Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph. (406) 433-5617  
Fax. (406) 433-5618  
[www.ienig.com](http://www.ienig.com)

OASIS PETROLEUM NORTH AMERICA, LLC  
PAD CROSS SECTIONS  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA  
Project No. S11d-319  
Drawn By: J.U.S.  
Checked By: C.S.V.  
Date: NOV/2011

**ACCESS APPROACH**  
 OASIS PETROLEUM NORTH AMERICA, LLC  
 1001 FANNIN, SUITE 1500 HOUSTON, TX 77002  
 "DAPHNE 5301 41-12B"  
 255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
 SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



NOTE: All utilities shown are preliminary only, a complete utilities location is recommended before construction.



© 2011, INTERSTATE ENGINEERING, INC.

**4/8**



Other offices in Minnesota, North Dakota and South Dakota

www.ienoi.com

OASIS PETROLEUM NORTH AMERICA, LLC  
ACCESS APPROACH  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: \_\_\_\_\_  
J.S.  
Checked By: \_\_\_\_\_  
C.S.V.

Project No.: \_\_\_\_\_  
SI1409339  
Date: NOV 2011

Revision No.	Date	By	Description



© 2011, INTERSTATE ENGINEERING, INC.

5/8



SHEET NO.

Interstate Engineering, Inc.  
 P.O. Box 648  
 425 East Main Street  
 Sidney, Montana 59270  
 Ph: (406) 433-5617  
 Fax: (406) 433-5618  
[www.iengi.com](http://www.iengi.com)  
 Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
 QUAD LOCATION MAP  
 SECTION 12, T153N, R101W  
 MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	J.J.S.	Project No.:	S11-09-339
Checked By:	C.S.V.	Date:	NOV. 2011

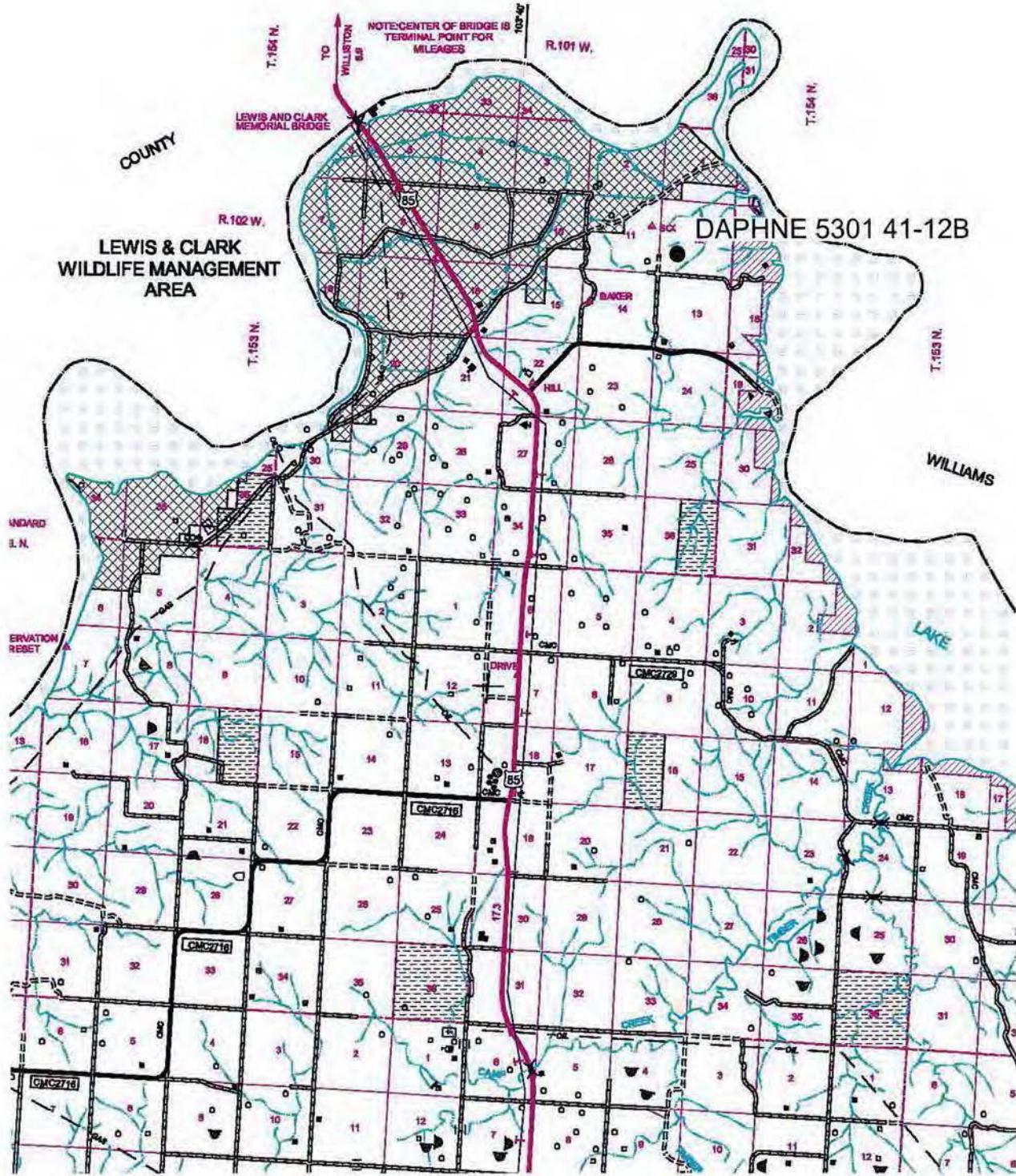
Revision No.	Date	By	Description

# COUNTY ROAD MAP

OASIS PETROLEUM NORTH AMERICA, LLC  
1001 FANNIN, SUITE 1500 HOUSTON, TX 77002

"DAPHNE 5301 41-12B"

255 FEET FROM SOUTH LINE AND 650 FEET FROM WEST LINE  
SECTION 12, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



© 2011, INTERSTATE ENGINEERING, INC.

SCALE: 1" = 2 MILE

6/8



Professionals you need, people you trust

Interstate Engineering, Inc.  
P.O. Box 648  
425 East Main Street  
Sidney, Montana 59270  
Ph (406) 433-5617  
Fax (406) 433-5618  
[www.lengi.com](http://www.lengi.com)  
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC  
COUNTY ROAD MAP  
SECTION 12, T153N, R101W  
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	J.J.S.	Project No.:	S11-09-339
Checked By:	C.S.V.	Date:	NOV 2011

Revision No.	Date	By	Description