



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)

Received

Well File No.
28554

FEB 12 2016

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 September 1, 2015
<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 checked="" type="checkbox"/> Change Production Method
<input type="checkbox"/> Temporarily Abandon	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Other	Well is now on pump

Well Name and Number Wade Federal 5300 31-30 2B					
Footages 1329 F S L	240 F W L	Qtr-Qtr LOT3	Section 30	Township 153 N	Range 100 W
Field Baker	Pool Bakken	County 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

Effective 09/01/2015 the above referenced well is on pump.

End of Tubing: 2-7/8" L-80 tubing @ 10119.74'

Pump: ESP @ 9944.12'

Company Oasis Petroleum North America LLC	Telephone Number 281-404-9436	
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature 	Printed Name Jennifer Swenson	
Title Regulatory Specialist	Date February 11, 2016	
Email Address jswenson@oasispetroleum.com		

<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date 3-3-2016	
By 	
Title TAYLOR ROTH	
Engineering Technician	



WELL COMPLETION OR RECOMPLETION REPORT - FORM 1

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

JUL 2015
RECEIVED
NO OIL & GAS
DIVISION

Well File No.
28554

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

Designate Type of Completion							
<input checked="" type="checkbox"/> Oil Well	<input type="checkbox"/> EOR Well	<input type="checkbox"/> Recompletion	<input type="checkbox"/> Deepened Well	<input type="checkbox"/> Added Horizontal Leg	<input type="checkbox"/> Extended Horizontal Leg		
<input type="checkbox"/> Gas Well	<input type="checkbox"/> SWD Well	<input type="checkbox"/> Water Supply Well	<input type="checkbox"/> Other:				
Well Name and Number Wade Federal 5300 31-30 2B				Spacing Unit Description Sec. 29/30 T153N R100W			
Operator Oasis Petroleum North America		Telephone Number (281) 404-9591		Field Baker			
Address 1001 Fannin, Suite 1500				Pool Bakken			
City Houston	State TX	Zip Code 77002	Permit Type		<input type="checkbox"/> Wildcat	<input checked="" type="checkbox"/> Development	<input type="checkbox"/> Extension

LOCATION OF WELL

At Surface		Qtr-Qtr Lot3	Section 30	Township 153 N	Range 100 W	County McKenzie
Spud Date November 14, 2015		Date TD Reached January 30, 2015		Drilling Contractor and Rig Number Patterson 488	KB Elevation (Ft) 2077	Graded Elevation (Ft) 2045

Type of Electric and Other Logs Run (See Instructions)

MWD/GR from KOP to TD; CBL from int. TD to surface

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) Lateral 1- 11034' to 20595'							Name of Zone (If Different from Pool Name)	
Date Well Completed (SEE INSTRUCTIONS) May 26, 2015			Producing Method Flowing	Pumping-Size & Type of Pump			Well Status (Producing or Shut-In) Producing	
Date of Test 05/26/2015	Hours Tested 24	Choke Size 40 /64	Production for Test	Oil (Bbls) 2329	Gas (MCF) 1859	Water (Bbls) 3393	Oil Gravity-API (Corr.) °	Disposition of Gas Sold
Flowing Tubing Pressure (PSI) 0		Flowing Casing Pressure (PSI) 1850		Calculated 24-Hour Rate	Oil (Bbls) 2329	Gas (MCF) 1859	Water (Bbls) 3393	Gas-Oil Ratio 798

GEOLOGICAL MARKERS

PLUG BACK INFORMATION

CORES CUT

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

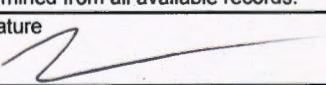
Drill Stem Test

Well Specific Stimulation

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												
40/70 White: 1424311 20/40 White: 6280250 20/40 CRC: 1417340												
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 jswenson@oasispetroleum.com	Date 07/10/2015
--	---	--------------------

Signature 	Printed Name Jennifer Swenson	Title Regulatory Specialist
--	----------------------------------	--------------------------------



AUTHORIZATION TO PURCHASE AND TRANSPORT OIL FROM LEASE - Form 8

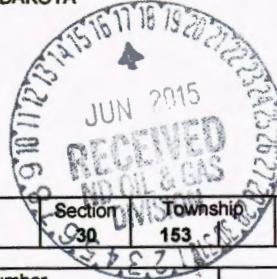
INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
600 EAST BOULEVARD DEPT 405
BISMARCK, ND 58505-0840
SFN 5698 (03-2000)

Well File No.
28554
NDIC CTB No.
To be assigned

228394

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND FOUR COPIES.



Well Name and Number WADE FEDERAL 5300 31-30 2B	Qtr-Qtr LOT3	Section 30	Township 153	Range 100	County Williams <i>mutterlinic</i>
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Operator Oasis Petroleum North America LLC	Telephone Number (281) 404-9573	Field BAKER
--	---	-----------------------

Address 1001 Fannin, Suite 1500	City Houston	State TX	Zip Code 77002
---	------------------------	--------------------	--------------------------

Name of First Purchaser Oasis Petroleum Marketing LLC	Telephone Number (281) 404-9627	% Purchased 100%	Date Effective May 1, 2015
Principal Place of Business 1001 Fannin, Suite 1500	City Houston	State TX	Zip Code 77002
Field Address	City	State	Zip Code
Transporter Hiland Crude, LLC	Telephone Number (580) 616-2058	% Transported 75%	Date Effective May 1, 2015
Address P.O. Box 3886	City Enid	State OK	Zip Code 73702
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
Hofmann Trucking	25%	May 1, 2015
Other Transporters Transporting From This Lease	% Transported	Date Effective
		May 1, 2015
Comments		

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records.	Date June 15, 2015
Signature 	Printed Name Dina Barron
	Title Mktg. Contracts Administrator

Above Signature Witnessed By:	Printed Name	Title
Signature 	Alexa Cardona	Marketing Analyst

FOR STATE USE ONLY		
Date Approved JUN 19 2015		
By 		
Title Erie Holerson		
Oil & Gas Production Analyst		

Industrial Commission of North Dakota
Oil and Gas Division

Well or Facility No

28554

Verbal Approval To Purchase and Transport Oil Tight Hole Yes

OPERATOR

Operator OASIS PETROLEUM NORTH AMERICA LL	Representative Todd Hanson	Rep Phone (701) 577-1632
---	--------------------------------------	------------------------------------

WELL INFORMATION

Well Name WADE FEDERAL 5300 31-30 2B	Inspector Richard Dunn
Well Location QQ Sec Twp Rng	County MCKENZIE
LOT3 30 153 N 100 W	Field BAKER
Footages 1329 Feet From the S Line	Pool BAKKEN
240 Feet From the W Line	
Date of First Production Through Permanent Wellhead	5/25/2015
	This Is Not The First Sales

PURCHASER / TRANSPORTER

Purchaser OASIS PETROLEUM MARKETING LLC	Transporter HOFMANN TRUCKING, LLC
---	---

TANK BATTERY

Central Tank Battery Number : 228394-01
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SALES INFORMATION **This Is Not The First Sales**

ESTIMATED BARRELS TO BE SOLD	ACTUAL BARRELS SOLD	DATE
15000	BBLS	5/26/2015
	BBLS	

DETAILS

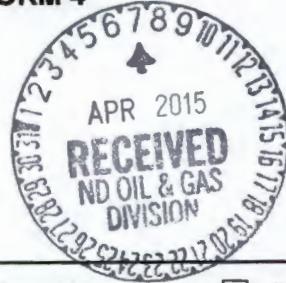
Must also forward Forms 6 & 8 to State prior to reaching 15000 Bbl estimate or no later than required time frame for submitting those forms.

Start Date	5/25/2015
Date Approved	6/17/2015
Approved By	Richard Dunn



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
SFSN 5749 (09-2006)



Well File No. 28554
28544

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date April 6, 2015	<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 type="checkbox"/> Other	Waiver from tubing/packer requirement

Well Name and Number

Wade Federal 5300 31-30 2B

Footages		Qtr-Qtr	Section	Township	Range
1329 F S L	240 F W L	LOT3	30	153 N	100 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 North America LLC requests a variance to NDAC 43-02-03-21 for the tubing/packer requirement: Casing, tubing, and cementing requirements during the completion period immediately following the upcoming fracture stimulation.

The following assurances apply:

1. the well is equipped with new 29# and 32# casing at surface with an API burst rating of 11,220 psi;
 2. The Frac design will use a safety factor of 0.85 API burst rating to determine the maximum pressure;
 3. Damage to the casing during the frac would be detected immediately by monitoring equipment;
 4. The casing is exposed to significantly lower rates and pressures during flowback than during the frac job;
 5. The frac fluid and formation fluids have very low corrosion and erosion rates;
 6. Production equipment will be installed as soon as possible after the well ceases flowing;
 7. A 300# gauge will be installed on the surface casing during the flowback period

Company Oasis Petroleum North America LLC		Telephone Number 281-404-9436
Address 1001 Fannin, Suite 1500		
City Houston		State TX
Zip Code 77002		
Signature 	Printed Name Jennifer Swenson	
Title Regulatory Specialist	Date April 6, 2015	
Email Address jswenson@oasispetroleum.com		

FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date	Aug 14, 2015
By	JGM.LH
Title	PETROLEUM ENGINEER

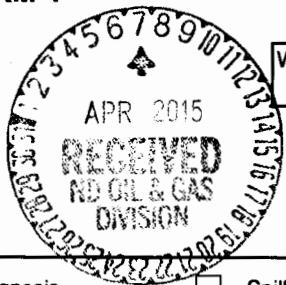


SUNDRY NOTICES AND REPORTS ON WELLS - FORM 4

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.

28554



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

 Notice of Intent

Approximate Start Date

April 6, 2015

 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

Change well status to CONFIDENTIAL

Well Name and Number

Wade Federal 5300 31-30 2B

Footages		Qtr-Qtr	Section	Township	Range
1329 F	S L	240 F W L	LOT3	30	153 N 100 W
Field Baker	Pool BAKKEN		County McKenzie		

24-HOUR PRODUCTION RATE

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

Name of Contractor(s)

Address	City	State	Zip Code
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DETAILS OF WORK

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

This well has not been completed.

OFF CONFIDENTIAL 10/07/15.

Company Oasis Petroleum North America LLC	Telephone Number 281-404-9436	
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature 	Printed Name Jennifer Swenson	
Title Regulatory Specialist	Date April 6, 2015	
Email Address jswenson@oasispetroleum.com		

FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date 4/08/15	
By 	
Title Engineering Technician	

Wade Federal 5300 31-30 2B

End of Well Report

Wade Federal 5300 31-30 2B

1329' FSL - 240' FWL

SEC 30, T153N, R100W

McKenzie County, ND

Prepared by:

Heather Coutts, *well-site geologist*

Columbine Logging, Inc.

602 S. Lipan St.

Denver, CO 80223



Prepared for:



Brendan Hargrove
, *operations geologists*
1001 Fannin, Suite 1500
Houston, Texas 77002

1.0 INTRODUCTION

Wade Federal 5200 31-30 2B is a East lateral Middle Bakken well located in SEC 30, T153N, R100W in McKenzie County, North Dakota. The primary pay zone was approximately 20' under the bottom of the Upper Bakken Shale. This pay zone was picked for its production potential and quality of reservoir rock. The objective was to steer the well within the defined pay zone and within the legal requirements of the state. Directional and MWD services were performed by Schlumberger/Pathfinder and RPM. Heather A. Coutts and Dylan E. Fowler were the primary well site geologists; providing geo-steering and mud logging from Columbine Logging, Inc.

Well Information

API #: 33-053-05995

Field: Indian Hills

Spud Date: 12/24/2014

TD Date: 01/30/2015

Surface Location: 1329' FSL & 240' FWL SEC 30, T153N, R100W, McKenzie County, North Dakota.

Intermediate Casing Point: 1624' FSL & 674' FWL; SEC 30; 11,034' MD, 10,714.70' TVD

Bottom Hole Location: 1994' FSL & 213' FEL; SEC 29; 20,610' MD, 10,818.85' TVD

Surface Elevation: 2045'

KB: 2077'

Casing Shoe: 11,034' MD, 10,714.70' TVD

Total Depth Drilled: 20,610'

Operator: Oasis

Rig: Patterson 488

Company man: Tyler LaClaire

Well-site Geologist: Heather Coutts
Dylan E. Fowler

Mud logging: Columbine Logging

DD: RPM

Mud Service: Reliable

Drilling Mud: Invert, Brine

MWD: Schlumberger/Pathfinder

2.0 SERVICES

2.1 Well site Geology (*Columbine Logging, Inc.*)

Geological consulting and mud logging started on 09/09/2014. Services provided included; morning reports, evening reports, noon and midnight reports, sample examination, sample recording via pictures, production of vertical and horizontal mudlog, geo steering, sample collection and bagging, sample mailing and a final end of well report.

2.1.1 Geosteering

Our offset GR TVD logs were from the Wade Federal 5300 21-30H well, located on the same well pad as Wade Federal 5300 41-30 2B. Within the Middle Bakken, the primary objective was to stay near the middle gamma markers which marks the inter layering between dolomitic siltstone and limy sandstones. Gamma patterns were compared with the offset log and a TVD log was created while landing the curve to in order to land in the targeted zone. Steering in the lateral was accomplished by calculating dip from relevant gamma markers, as well as by using lithology, total gas and ROP to determine our position within the formation.

2.1.2 Gamma and Surveys

Gamma and survey MWD services were provided by Schlumberger/Pathfinder. The majority of the well was drilled within the target area of the Middle Bakken.

2.2 Mud Logging (*Columbine Logging, Inc.*)

2.2.1 Sample Examination

Samples were collected every 30 ft in the straight hole and build section, and every 30 ft while drilling the lateral. Descriptions included; mineralogy, color, firmness, argillaceous content, structure, texture, allochems, porosity, oil stain, and hydrocarbon fluorescence. Carbonate identification was determined with 10% dilute HCl⁻, alizarin red and calcimeter. Hydrocarbon fluorescence was determined using a fluoroscope with a UV lamp.

2.2.2 Gas Detection

Gas was logged using a Bloodhound total gas/chromatograph system. The gas detection system uses an infra-red detector to measure total gas and the chromatograph separates and measures gases C1, C2, C3, iC4 and nC4. Gas was recorded in units where 1 unit equals 100 ppm. The gas detection system measured gases: C1, C2, C3, IC4, NC4, H2S, O2 and CO₂.

The Bloodhound Gas Detection and Chromatograph system use digital signal processing techniques and non-dispersive infrared and chemical sensors for gas detection. The system uses a proprietary chromatograph, which has the capability to detect from 0 to 10,000 gas units. This translates as 0 to 100% typical naturally-occurring hydrocarbon gas mixtures. Calibration is performed using National Institute of Standards and Technology (NIST) traceable calibration gases. Lab calibration points include 0%, 2.5%, and 100% pure methane. Complete immunity to saturation or damage in the presence of high concentrations of both light and heavy hydrocarbon gases precludes the necessity of constant re-calibration or zero referencing. This allows the Bloodhound to react to hydrocarbon based gases from zero to 100% in concentration without dilution.

Lag time was approximated from a calculation of annular velocity based on: pump output, open-hole diameter, cased hole diameter, collar diameter, drill pipe diameter and bottom hole assembly. Connection gases were monitored to confirm lag time calculations and thereby adjust lag time when needed.

3.0 GEOLOGY

3.1 Formation Tops Formation tops were picked using ROP, lithology, and gamma ray to identify markers in the curve and lateral (Table 3.1).

FORMATION TOPS						
Formation/Marker Beds	ACTUAL				Prognosis	
Vertical Section	Top MD (ft)	Top TVD (ft)	THICKNESS (ft)	Difference (ft)	TVD KB/DF(ft)	TVDSS (ft)
Kibbey Lime	8352	8351	144	-4	8347	-6270
Charles Salt	8496	8495	676	-4	8491	-6414
Base Last Salt	9172	9171	216	-3	9168	-7091
Mission Canyon	9388	9387	547	-3	9384	-7307
Lodgepole	9935	9934	738	-2	9932	-7855
False Bakken	10786	10672	8	-7	10665	-8588
Upper Bakken Shale	10807	10680	18	-5	10675	-8598
Middle Bakken	10868	10698	~34	-4	10694	-8617
Middle Bakken (Top of Target)	10866	10706	n/a	-4	10702	-8625
Middle Bakken (Base of target)	10866	10717	n/a	-4	10713	-8636
Lower Bakken Shale	10866	10730	~11	-4	10726	-8649

Table 3.1 Wade Federal 5300 31-30 2B Formation Tops

3.2 Lithology

Sample analysis began at 8,000' MD in the Otter Formation.

3.3 Formation Dip

The formation had an average dip of 89.4°.

3.4 Shows

The vertical-build section was drilled with invert mud and the lateral was drilled with brine/production water. The oil-based mud contributed a background gas of 200-300 units, and saturated cuttings with oil, making all cuttings in the vertical show the same

cut and fluorescence. Gas shows were around 3500+ units during the drilling of the lateral.

3.5 Oil Shows

Invert mud was used in the vertical, masking any oil shows. In the lateral part of the well the oil shows were consistently a bright blue green fluorescence with a bright diffuse blue to blue green cut and a medium brown residue ring.

4.0 WELLBORE

The surface location is 1329' FSL & 240' FWL SEC 30, T153N, R100W, McKenzie County, North Dakota. Ground elevation is 2,045' and KB elevation was 2,077', referenced to the Kelly bushing of Patterson 488. The curve was landed in the Middle Bakken at 11,034' MD, 10,714.70' TVD. The lateral was drilled to TD at 20,610' MD, 10,818.85' TVD, 1994'FSL & 213 FEL; SEC 29. Figure 4.1 shows a cross-section of the lateral.

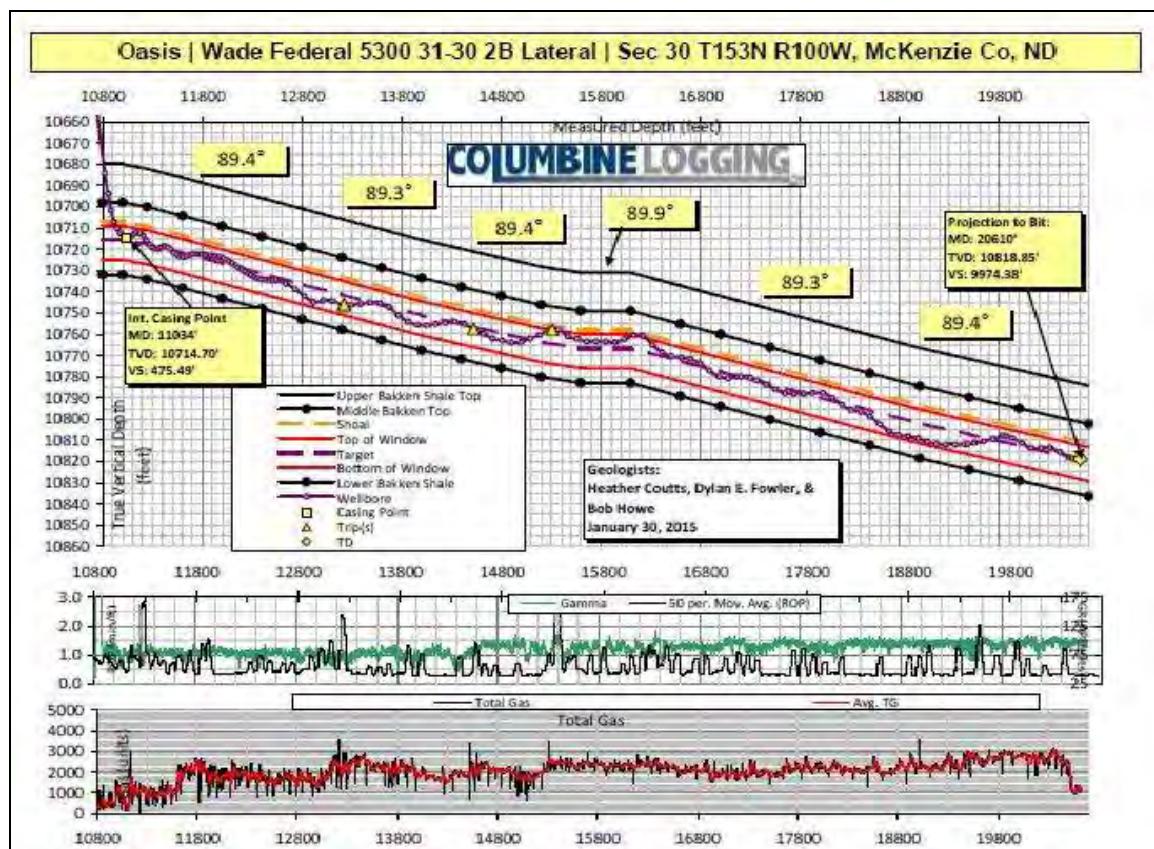


Figure 4.1 Wellbore Cross

5.0 SUMMARY AND CONCLUSION

Wade Federal 5300 31-30 2B is a South lateral Middle Bakken well located in SEC 30, T153N, R100W in McKenzie County, North Dakota. The primary pay zone was 20' under the bottom of the Upper Bakken Shale. This pay zone was picked for its production potential and quality of reservoir rock. The objective was to steer the well within the defined pay zone and within the legal requirements of the state.

The primary objective was to stay near the middle gamma markers which marks the inter layering between dolomitic siltstone and limy sandstones. Gamma patterns were compared with the offset log and a TVD log was created while landing the curve to in order to land in the targeted zone. Steering in the lateral was accomplished by calculating dip from relevant gamma markers, as well as by using lithology, total gas and ROP to determine our position within the formation.

The formation had an average dip of 89.4°. (see pg. 5, fig 4.1 for a detailed formation dip profile).

Currently the well is awaiting completion.

Heather Coutts, Well-Site Geologist
Columbine Logging, Inc.
9844 Titan Ct. Unit #6
Littleton, CO 80125-9354
(303) 289-7764





Oil and Gas Division

28554

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

January 8, 2016

Michael Kukuk
OASIS PETRO NO AMER
1001 FANNIN ST. SUITE 1500
HOUSTON, TX 77002

RE: See Attached List of Wells
List Reference WF# 28554

Dear Michael Kukuk:

We have not received the geological reports on the referenced well list. Please submit one paper copy and one digital pdf file of this report for each well.

If you have any questions, please contact Richard Suggs at (701) 328-8020.

Sincerely,

Taylor Roth
Engineering Technician



A Schlumberger Company
9251 E 104th Ave.
Commerce City, CO 80640
(303) 439-5500

Directional Survey Certification Form

Oasis Petroleum	Wade Federal 5300 31-30 2B Original Hole	27-Feb-2015
Company	Well Name	Final report Date
15CCO0093	ND, McKenzie County	33-053-05995
PathFinder Job Number	County / State	API Number
N 48° 2' 32.58000"	W 103° 36' 11.41000"	Sec 30 Twn 153 N Rng 100 W
N 48.04238333	W 103.60316944	Surface Section - Township - Range
Surface Latitude	Surface Longitude	
NAD83 North Dakota State Plane, NZ	Patterson 488	KB 25ft @ 2070.00 ft / GL: 2045.00 ft MSL
Datum & Coordinate System	Rig Contractor	Height Reference
Survey Depth	136.00	to
	Depth From	20538.00
		Depth To
Measurement While Drilling		
Type of Survey		
Survey Depth	20538.00	to
	Depth From	20610.00
		Depth To
Straight line projection to Bit/TD		
Type of Survey		
Site Supervisors	-	B Feddersen - FE1
	Directional Driller 1	MWD Surveyor 1
	-	R. Wirth - FE
	Directional Driller 2	MWD Surveyor 2

The data submitted in this report conforms to the standards and procedures as set forth by Schlumberger. This report represents a true and correct directional wellbore survey based on original survey data obtained at the well site.

Matt VanderSchaaf

Matt VanderSchaaf
PathFinder Well Planner III

2/27/2015

Date



Wade Federal 5300 31-30 2B MWD 0' to 20610' Definitive Survey Geodetic Report
(Def Survey)

PATHFINDER
A Schlumberger Company

Report Date: February 27, 2015 - 01:45 PM
Client: Oasis Petroleum
Field: ND, McKenzie County (NAD 83 NZ) Oasis 2014
Structure / Slot: Oasis 30-153N-100W (Wade Federal 5300 31-41-30 2-5 Pad) - Patterson 488 / Wade Federal 5300 31-30 2B
Well: Wade Federal 5300 31-30 2B
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Wade Federal 5300 31-30 2B MWD 0' to 20610' Definitive
Survey Date: February 27, 2015
Tort / AHD / DDI / ERD Ratio: 318.114 ° / 10199.847 ft / 6.791 / 0.943
Coordinate Reference System: NAD83 North Dakota State Plane, Northern Zone, Feet
Location Lat / Long: N 48° 2' 32.58000", W 103° 36' 11.40999"
Location Grid N/E Y/X: N 395520.744 ft, E 1209619.550 ft
CRS Grid Convergence Angle: -2.3092 °
Grid Scale Factor: 0.99993611
Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 86.220 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB 25ft
TVD Reference Elevation: 2070.000 ft above MSL
Seabed / Ground Elevation: 2045.000 ft above MSL
Magnetic Declination: 8.372 °
Total Gravity Field Strength: 1000.0456mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 56206.684 nT
Magnetic Dip Angle: 72.892 °
Declination Date: February 27, 2015
Magnetic Declination Model: BGGM 2014
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True
North: 8.3723 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC	NS (ft)	EW (ft)	DLS ('/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S °')	Longitude (E/W °')
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	395520.74	1209619.55	N 48 2 32.58	W 103 36 11.41
Begin Pathfinder Survey	136.00	0.70	236.00	136.00	-0.72	-0.46	-0.69	0.51	395520.31	1209618.84	N 48 2 32.58	W 103 36 11.42
	226.00	0.70	195.02	225.99	-1.37	-1.30	-1.29	0.54	395519.49	1209618.21	N 48 2 32.57	W 103 36 11.43
	319.00	0.70	214.20	318.98	-1.90	-2.32	-1.75	0.25	395518.50	1209617.70	N 48 2 32.56	W 103 36 11.44
	409.00	0.90	210.30	408.97	-2.64	-3.39	-2.42	0.23	395517.46	1209617.00	N 48 2 32.55	W 103 36 11.45
	500.00	0.50	215.60	499.97	-3.29	-4.33	-3.01	0.44	395516.54	1209616.37	N 48 2 32.54	W 103 36 11.45
	590.00	0.90	209.60	589.96	-3.93	-5.26	-3.59	0.45	395515.63	1209615.75	N 48 2 32.53	W 103 36 11.46
	680.00	0.70	212.80	679.95	-4.64	-6.34	-4.24	0.23	395514.58	1209615.06	N 48 2 32.52	W 103 36 11.47
	771.00	0.50	262.70	770.95	-5.37	-6.85	-4.93	0.59	395514.09	1209614.35	N 48 2 32.51	W 103 36 11.48
	858.00	0.50	243.00	857.94	-6.10	-7.08	-5.65	0.20	395513.90	1209613.62	N 48 2 32.51	W 103 36 11.49
	948.00	0.40	256.10	947.94	-6.77	-7.33	-6.30	0.16	395513.68	1209612.96	N 48 2 32.51	W 103 36 11.50
	1032.00	0.20	185.00	1031.94	-7.08	-7.55	-6.60	0.46	395513.47	1209612.65	N 48 2 32.51	W 103 36 11.51
	1119.00	0.20	49.30	1118.94	-6.98	-7.60	-6.50	0.43	395513.41	1209612.75	N 48 2 32.51	W 103 36 11.51
	1203.00	0.40	52.80	1202.94	-6.62	-7.32	-6.15	0.24	395513.67	1209613.11	N 48 2 32.51	W 103 36 11.50
	1288.00	0.40	31.30	1287.94	-6.20	-6.89	-5.76	0.18	395514.09	1209613.52	N 48 2 32.51	W 103 36 11.49
	1378.00	0.50	94.30	1377.93	-5.63	-6.65	-5.21	0.53	395514.31	1209614.08	N 48 2 32.51	W 103 36 11.49
	1464.00	0.40	90.80	1463.93	-4.96	-6.69	-4.53	0.12	395514.25	1209614.75	N 48 2 32.51	W 103 36 11.48
	1550.00	0.50	132.70	1549.93	-4.40	-6.94	-3.96	0.39	395513.97	1209615.32	N 48 2 32.51	W 103 36 11.47
	1637.00	0.70	139.30	1636.93	-3.82	-7.60	-3.33	0.24	395513.28	1209615.92	N 48 2 32.50	W 103 36 11.46
	1724.00	0.50	142.50	1723.92	-3.29	-8.31	-2.75	0.23	395512.55	1209616.47	N 48 2 32.50	W 103 36 11.45
	1812.00	0.20	12.80	1811.92	-3.04	-8.46	-2.48	0.73	395512.39	1209616.73	N 48 2 32.50	W 103 36 11.45
	1899.00	0.20	147.80	1898.92	-2.92	-8.44	-2.37	0.42	395512.40	1209616.84	N 48 2 32.50	W 103 36 11.44
	1985.00	0.50	226.20	1984.92	-3.14	-8.83	-2.56	0.58	395512.02	1209616.64	N 48 2 32.49	W 103 36 11.45
	2071.00	0.70	276.10	2070.91	-3.94	-9.03	-3.35	0.63	395511.85	1209615.84	N 48 2 32.49	W 103 36 11.46
	2090.00	1.10	289.50	2089.91	-4.22	-8.96	-3.64	2.37	395511.94	1209615.55	N 48 2 32.49	W 103 36 11.46
	2184.00	1.23	277.51	2183.89	-6.04	-8.53	-5.49	0.29	395512.44	1209613.72	N 48 2 32.50	W 103 36 11.44
	2279.00	1.58	285.03	2278.86	-8.28	-8.06	-7.77	0.42	395513.01	1209611.46	N 48 2 32.50	W 103 36 11.52
	2374.00	0.79	295.35	2373.84	-10.09	-7.44	-9.62	0.86	395513.70	1209609.63	N 48 2 32.51	W 103 36 11.55
	2469.00	0.97	325.99	2468.83	-11.07	-6.49	-10.67	0.52	395514.69	1209608.63	N 48 2 32.52	W 103 36 11.57
	2564.00	1.41	332.06	2563.81	-11.95	-4.79	-11.66	0.48	395516.43	1209607.70	N 48 2 32.56	W 103 36 11.58
	2659.00	0.62	13.79	2658.80	-12.28	-3.26	-12.09	1.09	395517.98	1209607.34	N 48 2 32.49	W 103 36 11.59
	2754.00	0.44	26.77	2753.79	-11.94	-2.43	-11.80	0.23	395518.79	1209607.66	N 48 2 32.56	W 103 36 11.58
	2848.00	0.70	6.80	2847.79	-11.65	-1.54	-11.57	0.34	395519.67	1209607.93	N 48 2 32.56	W 103 36 11.58
	2944.00	0.70	12.81	2943.78	-11.37	-0.39	-11.37	0.08	395520.82	1209608.17	N 48 2 32.58	W 103 36 11.58
	3039.00	0.44	359.80	3038.78	-11.18	0.54	-11.24	0.30	395521.74	1209608.34	N 48 2 32.59	W 103 36 11.58
	3134.00	0.53	23.69	3133.77	-10.96	1.31	-11.07	0.23	395522.50	1209608.54	N 48 2 32.59	W 103 36 11.57
	3229.00	0.62	17.53	3228.77	-10.57	2.20	-10.74	0.11	395523.38	1209608.91	N 48 2 32.61	W 103 36 11.57
	3324.00	0.44	35.74	3323.76	-10.15	2.99	-10.37	0.26	395524.15	1209609.31	N 48 2 32.61	W 103 36 11.56
	3419.00	0.53	25.87	3418.76	-9.70	3.68	-9.97	0.13	395524.82	1209609.74	N 48 2 32.62	W 103 36 11.56
	3514.00	0.53	24.30	3513.76	-9.28	4.48	-9.59	0.02	395525.60	1209610.15	N 48 2 32.62	W 103 36 11.55
	3609.00	0.44	49.17	3606.75	-8.78	5.12	-9.14	0.24	395526.22	1209610.63	N 48 2 32.63	W 103 36 11.54
	3704.00	0.26	44.55	3703.75	-8.33	5.51	-8.71	0.19	395526.60	1209611.07	N 48 2 32.66	W 103 36 11.54
	3799.00	0.53	21.26	3798.75	-7.98	6.07	-8.40	0.33	395527.15	1209611.40	N 48 2 32.67	W 103 36 11.53
	3893.00	0.44	40.73	3892.75	-7.54	6.75	-8.01	0.20	395527.81	1209611.82	N 48 2 32.65	W 103 36 11.53
	3988.00	0.53	37.28	3987.74	-7.00	7.38	-7.50	0.10	395528.42	1209612.35	N 48 2 32.65	W 103 36 11.52
	4083.00	0.53	44.26	4082.74	-6.38	8.04	-6.93	0.07	395529.06	1209612.95	N 48 2 32.66	W 103 36 11.51
	4179.00	0.79	47.41	4178.73	-5.54	8.81	-6.13	0.27	395529.79	1209613.78	N 48 2 32.67	W 103 36 11.50
	4274.00	0.70	59.69	4273.72	-4.51	9.54	-5.15	0.19	395530.49	1209614.79	N 48 2 32.67	W 103 36 11.49
	4369.00	0.88	31.93	4368.71	-3.56	10.45	-4.26	0.44	395531.36	1209615.71	N 48 2 32.68	W 103 36 11.47
	4464.00	1.14	18.72	4463.70	-2.78	11.97	-3.57	0.37	395532.85	1209616.46	N 48 2 32.70	W 103 36 11.46
	4559.00	1.41	25.79	4558.68	-1.84	13.92	-2.76	0.33	395534.76	1209617.35	N 48 2 32.72	W 103 36 11.45
	4654.00	1.32	23.62	4653.65	-0.76	15.97	-1.81	0.11	395536.77	1209618.38	N 48 2 32.74	W 103 36 11.44
	4749.00	1.23	21.91	4748.63	0.19	17.92	-0.99	0.10	395538.69	1209619.28	N 48 2 32.76	W 103 36 11.42
	4844.00	1.06	23.41	4843.61	1.03	19.67	-0.26	0.18	395540.41	1209620.08	N 48 2 32.77	W 103 36 11.41
	4939.00	0.88	17.74	4938.59	1.70	21.17	0.31	0.21	395541.89	1209620.71	N 48 2 32.79	W 103 36 11.41
	5034.00	0.62	15.28	5033.59	2.14	22.36	0.66	0.28	395543.06	1209621.12	N 48 2 32.80	W 103 36 11.40
	5129.00	0.53	32.04	5128.58	2.56	23.23	1.03	0.20	395543.91	1209621.52	N 48 2 32.81	W 103 36 11.39
	5223.00	0.70	51.86	5222.57	3.29	23.96	1.72	0.29	395544.61	1209622.23	N 48 2 32.82	W 103 36 11.38
	5318.00	1.14	47.59	5317.56	4.51	24.95	2.87	0.47	395545.56	1209623.42	N 48 2 32.83	W 103 36 11.37
	5413.00	0.97	42.68	5412.55	5.83	26.18	4.11	0.20	395546.74	1209624.71	N 48 2 32.84	W 103 36 11.35
	5509.00	0.88	20.70	5508.53	6.72	27.47	4.92	0.38	395547.99	1209625.58	N 48 2 32.85	W 103 36 11.34
	5604.00	0.79	2.12	5603.52	7.09	28.80	5.21	0.30	395549.31	1209625.91	N 48 2 32.86	W 103 36 11.33
	5698.00	1.06	21.70	5697.51	7.53	30.26	5.55	0.44	395550.75	1209626.32	N 48 2 32.88	W 103 36 11.33
	5794.00	0.44	7.11	5793.50	7.99	31.45	5.93	0.67	395551.93	1209626.74	N 48 2 32.89	W 103 36 11.32
	5889.00	0.26	21.47	5888.50	8.15	32.01	6.05	0.21	395552.48	1209626.88	N 48 2	

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S °")	Longitude (E/W °")
	6927.00	0.53	293.89	6926.48	6.16	35.49	3.83	0.19	395556.05	1209624.81	N 48 2 32.93	W 103 36 11.35
	7022.00	0.79	296.47	7021.48	5.21	35.96	2.84	0.28	395556.56	1209623.84	N 48 2 32.93	W 103 36 11.37
	7117.00	0.88	284.01	7116.47	3.95	36.43	1.55	0.21	395557.08	1209622.56	N 48 2 32.94	W 103 36 11.39
	7212.00	0.97	288.26	7211.46	2.51	36.86	0.08	0.12	395557.57	1209621.11	N 48 2 32.94	W 103 36 11.41
	7307.00	0.44	320.68	7306.45	1.55	37.40	-0.92	0.68	395558.14	1209620.14	N 48 2 32.95	W 103 36 11.42
	7402.00	0.62	320.21	7401.44	1.03	38.07	-1.48	0.19	395558.84	1209619.61	N 48 2 32.96	W 103 36 11.43
	7497.00	0.62	316.63	7496.44	0.40	38.84	-2.16	0.04	395559.64	1209618.96	N 48 2 32.96	W 103 36 11.44
	7592.00	0.53	329.10	7591.43	-0.12	39.59	-2.74	0.16	395560.41	1209618.41	N 48 2 32.97	W 103 36 11.45
	7687.00	0.53	335.39	7686.43	-0.48	40.37	-3.15	0.06	395561.20	1209618.03	N 48 2 32.98	W 103 36 11.46
	7781.00	0.18	269.58	7780.43	-0.78	40.76	-3.48	0.52	395561.61	1209617.72	N 48 2 32.98	W 103 36 11.46
	7876.00	0.09	2.42	7875.43	-0.92	40.84	-3.62	0.22	395561.69	1209617.58	N 48 2 32.98	W 103 36 11.46
	7971.00	0.09	98.00	7970.43	-0.84	40.90	-3.55	0.14	395561.75	1209617.66	N 48 2 32.98	W 103 36 11.46
	8066.00	0.09	263.39	8065.43	-0.84	40.88	-3.55	0.19	395561.73	1209617.65	N 48 2 32.98	W 103 36 11.46
	8161.00	0.35	288.84	8160.43	-1.19	40.97	-3.90	0.29	395561.83	1209617.31	N 48 2 32.98	W 103 36 11.47
	8256.00	0.62	336.76	8255.42	-1.62	41.53	-4.37	0.49	395562.42	1209616.85	N 48 2 32.99	W 103 36 11.47
	8351.00	0.70	344.86	8350.42	-1.91	42.56	-4.73	0.13	395563.46	1209616.54	N 48 2 33.00	W 103 36 11.48
	8446.00	0.44	339.96	8445.41	-2.13	43.47	-5.00	0.28	395564.37	1209616.30	N 48 2 33.01	W 103 36 11.48
	8541.00	1.06	152.60	8540.41	-1.88	43.03	-4.72	1.58	395563.93	1209616.56	N 48 2 33.00	W 103 36 11.48
	8636.00	0.88	115.97	8635.40	-0.89	41.93	-3.66	0.67	395562.78	1209617.58	N 48 2 32.99	W 103 36 11.46
	8730.00	0.88	90.91	8729.39	0.45	41.60	-2.29	0.41	395562.40	1209618.94	N 48 2 32.99	W 103 36 11.44
	8824.00	0.88	83.24	8823.37	1.89	41.68	-0.85	0.13	395562.42	1209620.38	N 48 2 32.99	W 103 36 11.42
	8920.00	0.44	3.24	8919.37	2.68	42.13	-0.10	0.95	395562.84	1209621.15	N 48 2 33.00	W 103 36 11.41
	9014.00	0.62	347.88	9013.37	2.65	42.99	-0.19	0.24	395563.70	1209621.09	N 48 2 33.00	W 103 36 11.41
	9109.00	0.44	342.47	9108.36	2.49	43.84	-0.41	0.20	395564.56	1209620.91	N 48 2 33.01	W 103 36 11.42
	9204.00	0.26	294.40	9203.36	2.21	44.28	-0.71	0.35	395565.01	1209620.62	N 48 2 33.02	W 103 36 11.42
	9299.00	0.18	277.90	9296.36	1.87	44.39	-1.06	0.11	395565.13	1209620.28	N 48 2 33.02	W 103 36 11.43
	9394.00	0.26	293.03	9393.36	1.53	44.49	-1.40	0.10	395565.25	1209619.94	N 48 2 33.02	W 103 36 11.43
	9489.00	0.26	296.85	9488.36	1.16	44.67	-1.79	0.02	395565.45	1209619.56	N 48 2 33.02	W 103 36 11.44
	9584.00	0.26	294.73	9583.36	0.78	44.86	-2.18	0.01	395565.65	1209619.18	N 48 2 33.02	W 103 36 11.44
	9679.00	0.26	279.21	9678.36	0.38	44.98	-2.59	0.07	395565.79	1209618.78	N 48 2 33.02	W 103 36 11.45
	9774.00	0.62	12.02	9773.35	0.31	45.52	-2.70	0.72	395566.33	1209618.69	N 48 2 33.03	W 103 36 11.45
	9869.00	0.70	17.14	9868.35	0.66	46.58	-2.42	0.10	395567.38	1209619.01	N 48 2 33.04	W 103 36 11.45
	9964.00	0.70	21.82	9963.34	1.12	47.67	-2.03	0.06	395568.46	1209619.44	N 48 2 33.05	W 103 36 11.44
	10059.00	0.53	19.84	10058.33	1.54	48.62	-1.67	0.18	395569.39	1209619.85	N 48 2 33.06	W 103 36 11.43
	10154.00	0.35	354.67	10153.33	1.71	49.33	-1.54	0.27	395570.09	1209620.00	N 48 2 33.07	W 103 36 11.43
	10186.00	0.35	356.86	10185.33	1.71	49.52	-1.56	0.04	395570.28	1209619.99	N 48 2 33.07	W 103 36 11.43
	10219.00	0.26	335.16	10218.33	1.68	49.69	-1.59	0.44	395570.45	1209619.96	N 48 2 33.07	W 103 36 11.43
	10250.00	0.88	50.04	10249.33	1.85	49.91	-1.44	2.74	395570.66	1209620.12	N 48 2 33.07	W 103 36 11.43
	10282.00	4.66	63.68	10281.29	3.25	50.64	-0.09	11.91	395571.34	1209621.50	N 48 2 33.06	W 103 36 11.41
	10314.00	8.79	67.83	10313.06	6.77	52.14	3.34	12.99	395572.70	1209624.99	N 48 2 33.07	W 103 36 11.36
	10345.00	12.13	68.62	10343.54	12.13	54.22	8.57	10.78	395574.57	1209630.30	N 48 2 33.12	W 103 36 11.28
	10377.00	16.36	68.59	10374.55	19.63	57.09	15.90	13.22	395577.15	1209637.74	N 48 2 33.14	W 103 36 11.18
	10409.00	20.14	69.40	10404.93	29.20	60.68	25.26	11.84	395580.35	1209647.23	N 48 2 33.18	W 103 36 11.04
	10440.00	23.65	70.12	10433.69	40.29	64.67	36.10	11.36	395583.90	1209658.23	N 48 2 33.22	W 103 36 10.88
	10472.00	27.70	70.48	10462.53	53.62	69.34	49.15	12.67	395588.04	1209671.46	N 48 2 33.26	W 103 36 10.69
	10504.00	31.39	70.88	10490.36	68.82	74.56	64.04	11.55	395592.66	1209686.54	N 48 2 33.32	W 103 36 10.47
	10535.00	35.44	71.87	10516.23	85.32	80.00	80.22	13.18	395597.44	1209702.92	N 48 2 33.37	W 103 36 10.23
	10567.00	39.39	71.75	10541.64	104.15	86.07	98.69	12.35	395602.76	1209721.62	N 48 2 33.43	W 103 36 9.96
	10599.00	43.26	71.15	10565.67	124.57	92.80	118.71	12.16	395608.68	1209741.90	N 48 2 33.50	W 103 36 9.66
	10631.00	47.04	69.73	10588.24	146.40	100.40	140.08	12.22	395615.41	1209763.56	N 48 2 33.57	W 103 36 9.35
	10662.00	51.35	68.35	10608.49	168.81	108.80	161.99	14.31	395622.92	1209785.78	N 48 2 33.65	W 103 36 9.03
	10694.00	55.31	68.05	10627.60	193.21	118.33	185.81	12.40	395631.48	1209809.97	N 48 2 33.75	W 103 36 8.68
	10725.00	58.74	68.09	10644.47	217.92	128.04	209.93	11.07	395640.21	1209834.46	N 48 2 33.84	W 103 36 8.32
	10757.00	63.31	67.63	10659.56	244.48	138.59	235.86	14.34	395649.71	1209860.78	N 48 2 33.95	W 103 36 7.94
	10789.00	67.80	66.45	10673.20	271.98	149.96	266.27	14.43	395659.99	1209888.03	N 48 2 34.06	W 103 36 7.54
	10820.00	70.70	67.59	10684.19	299.36	161.27	289.36	9.97	395670.21	1209915.15	N 48 2 34.17	W 103 36 7.15
	10852.00	74.13	65.38	10693.85	328.06	173.44	317.32	12.58	395681.25	1209943.58	N 48 2 34.29	W 103 36 6.74
	10884.00	77.38	62.53	10701.73	356.76	187.06	345.18	13.33	395693.74	1209971.96	N 48 2 34.43	W 103 36 6.33
	10915.00	82.13	61.10	10707.24	384.53	201.47	372.05	15.98	395707.05	1209999.40	N 48 2 34.57	W 103 36 5.93
	10947.00	86.44	60.23	10710.43	413.25	217.07	399.81	13.74	395721.51	1201027.75	N 48 2 34.72	W 103 36 5.53
	10979.00	86.44	60.75	10712.41	442.02	232.80	427.60	1.62	395731.61	1201056.16	N 48 2 34.88	W 103 36 5.12
	11010.00	87.14	60.93	10714.15	469.98	247.88	454.63	2.33	395750.09	1210083.77	N 48 2 35.03	W 103 36 4.72
	11033.00	90.04	59.91	10714.71	490.68	259.23	474.62	13.37	395760.62	1210104.20	N 48 2 35.14	W 103 36 4.43
	11086.00	91.63	61.56	10713.94	538.51	285.13	520.85	4.32	395784.64	1210151.43	N 48 2 35.39	W 103 36 3.75
	11116.00	92.68	61.03	10712.81	576.95	397.22	547.14	3.92	395887.87	1210178.28	N 48 2 35.55	W 103 36 3.36
	11147.00	90.22	61.49	10712.03	593.79	314.43	574.31	8.07	395891.29	1210401.22	N 48 2 36.64	W 103 35 9.75
	11192.00	91.63	63.97	10719.14	818.75	425.46	792.42	7.87	395913.91	1210428.42	N 48 2 36.78	W 103 35 9.75
	11423.00	90.31	64.45	10718.62	847.48	438.95	820.33	4.53	395926.26	1210456.85	N 48 2 36.91	W 103 35 9.34
	11453.00	87.93	65.95	10719.08	875.48	451.53	847.56	9.38	395937.73	1210484.56	N 48 2 37.04	W 103 35 8.94
	11484.00	87.49	65.53	10720.32	904.50	464.25	875.80	1.96	395949.31	1210513.29	N 48 2 37.16	

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S °")	Longitude (E/W °")
	12509.00	89.78	88.96	10734.55	1915.85	648.14	1877.21	5.46	396092.68	1211521.23	N 48 2 38.98	W 103 35 43.78
	12541.00	89.87	88.53	10734.64	1947.82	648.84	1909.20	1.37	396092.09	1211553.22	N 48 2 38.98	W 103 35 43.31
	12636.00	88.29	90.36	10736.17	2042.65	649.76	2004.18	2.54	396083.19	1211648.15	N 48 2 38.99	W 103 35 41.92
	12730.00	88.55	89.14	10738.76	2136.44	650.17	2098.14	1.33	396085.81	1211742.04	N 48 2 38.99	W 103 35 40.53
	12824.00	87.41	88.93	10742.07	2230.26	651.75	2192.06	1.23	396083.61	1211835.95	N 48 2 39.01	W 103 35 39.15
	12918.00	89.08	87.89	10744.95	2324.14	654.36	2285.98	2.09	396082.43	1211929.89	N 48 2 39.04	W 103 35 37.77
	13013.00	91.80	88.11	10744.22	2419.09	657.67	2380.91	2.87	396081.92	1212024.87	N 48 2 39.07	W 103 35 36.37
	13107.00	88.02	91.38	10744.37	2512.88	658.09	2474.88	5.32	396078.55	1212118.78	N 48 2 39.07	W 103 35 34.99
	13203.00	89.96	89.64	10746.06	2608.59	657.24	2570.85	2.71	396073.83	1212124.63	N 48 2 39.08	W 103 35 33.58
	13297.00	89.78	89.72	10746.28	2702.42	657.76	2664.85	0.21	396070.57	1212308.57	N 48 2 39.07	W 103 35 32.19
	13391.00	90.84	89.60	10745.77	2796.24	658.32	2758.85	1.13	396067.34	1212402.50	N 48 2 39.07	W 103 35 30.81
	13485.00	89.96	89.79	10745.11	2890.07	658.82	2852.84	0.96	396064.05	1212496.44	N 48 2 39.08	W 103 35 29.43
	13579.00	89.69	88.65	10745.40	2983.94	660.10	2946.83	1.25	396061.54	1212590.39	N 48 2 39.09	W 103 35 28.04
	13674.00	88.02	90.08	10747.30	3078.77	661.15	3041.80	2.31	396058.77	1212685.32	N 48 2 39.10	W 103 35 26.65
	13768.00	87.32	89.21	10751.12	3172.52	661.73	3135.72	1.19	396055.56	1212779.18	N 48 2 39.11	W 103 35 25.26
	13863.00	89.08	88.27	10754.10	3267.38	663.82	3230.64	2.10	396053.83	1212874.11	N 48 2 39.13	W 103 35 23.87
	13957.00	89.16	88.35	10755.55	3361.30	666.59	3324.59	0.12	396052.81	1212968.09	N 48 2 39.16	W 103 35 22.48
	14052.00	90.48	88.92	10755.85	3456.22	668.86	3419.56	1.51	396051.24	1213063.06	N 48 2 39.18	W 103 35 21.09
	14147.00	90.31	89.24	10755.19	3551.10	670.38	3514.55	0.38	396048.94	1213158.03	N 48 2 39.19	W 103 35 19.69
	14241.00	90.31	89.61	10754.68	3644.95	671.33	3608.54	0.39	396046.10	1213251.98	N 48 2 39.20	W 103 35 18.31
	14335.00	90.57	89.75	10753.96	3738.77	671.85	3702.54	0.31	396042.83	1213345.91	N 48 2 39.21	W 103 35 16.92
	14430.00	87.93	90.25	10755.20	3835.55	671.85	3797.52	2.83	396039.01	1213440.81	N 48 2 39.21	W 103 35 15.52
	14526.00	89.16	90.05	10757.64	3929.29	671.60	3893.49	1.30	396034.89	1213536.68	N 48 2 39.20	W 103 35 14.11
	14620.00	88.11	91.29	10759.88	4022.98	670.50	3987.45	1.73	396030.01	1213630.52	N 48 2 39.19	W 103 35 12.73
	14714.00	89.25	90.84	10762.05	4116.62	668.75	4081.41	1.30	396024.48	1213724.33	N 48 2 39.18	W 103 35 11.35
	14808.00	89.43	91.33	10763.13	4210.27	666.97	4175.38	0.56	396018.91	1213818.15	N 48 2 39.16	W 103 35 9.96
	14903.00	89.52	91.83	10764.00	4304.85	664.36	4270.34	0.53	396012.47	1213912.92	N 48 2 39.13	W 103 35 8.57
	14997.00	90.66	92.24	10763.85	4398.37	661.02	4364.28	1.29	396005.35	1214006.64	N 48 2 39.10	W 103 35 7.18
	15091.00	91.54	92.57	10762.05	4491.80	657.07	4458.18	1.00	395997.63	1214100.30	N 48 2 39.06	W 103 35 5.80
	15187.00	90.40	91.12	10760.42	4587.32	653.98	4554.11	1.92	395990.67	1214196.02	N 48 2 39.03	W 103 35 4.39
	15280.00	92.68	90.76	10757.92	4679.97	652.46	4647.06	2.48	395985.41	1214288.83	N 48 2 39.01	W 103 35 3.02
	15375.00	87.49	91.56	10757.78	4774.58	650.54	4742.01	5.53	395979.66	1214363.61	N 48 2 38.99	W 103 35 1.62
	15469.00	88.55	89.85	10761.03	4868.23	649.38	4835.94	2.14	395974.72	1214477.42	N 48 2 38.98	W 103 35 0.24
	15564.00	89.96	88.33	10762.26	4963.10	650.89	4930.92	2.18	395972.40	1214572.37	N 48 2 39.00	W 103 34 58.84
	15659.00	88.64	88.91	10763.43	5058.01	653.18	5025.88	1.52	395970.86	1214667.34	N 48 2 39.02	W 103 34 57.45
	15754.00	91.36	89.36	10763.43	5152.87	654.61	5120.86	2.90	395968.47	1214762.30	N 48 2 39.03	W 103 34 56.05
	15849.00	88.46	89.67	10763.57	5247.71	655.42	5215.84	3.07	395965.44	1214857.23	N 48 2 39.04	W 103 34 54.65
	15944.00	91.19	89.57	10763.86	5342.53	656.05	5310.83	2.88	395962.25	1214952.16	N 48 2 39.05	W 103 34 53.25
	16038.00	90.57	90.77	10762.42	5436.29	655.77	5404.82	1.44	395958.18	1215046.06	N 48 2 39.04	W 103 34 51.87
	16133.00	91.71	90.99	10760.53	5530.96	654.31	5499.79	1.22	395952.90	1215140.88	N 48 2 39.05	W 103 34 50.47
	16227.00	88.02	93.34	10760.75	5624.43	650.76	5593.70	4.65	395945.57	1215234.57	N 48 2 38.99	W 103 34 49.09
	16322.00	86.88	92.43	10764.98	5718.69	645.98	5688.48	1.53	395936.97	1215239.07	N 48 2 38.95	W 103 34 47.70
	16415.00	88.64	91.00	10768.61	5811.19	643.20	5781.36	2.44	395930.45	1215421.76	N 48 2 38.92	W 103 34 46.33
	16510.00	89.25	88.83	10770.36	5905.97	643.34	5876.34	2.37	395926.77	1215516.66	N 48 2 38.92	W 103 34 44.93
	16605.00	89.87	88.68	10771.09	6000.87	645.41	5971.31	0.67	395925.00	1215611.64	N 48 2 38.94	W 103 34 43.53
	16700.00	89.43	87.40	10771.67	6095.82	648.65	6066.25	1.42	395924.43	1215706.62	N 48 2 38.97	W 103 34 42.14
	16794.00	88.02	88.56	10773.77	6189.75	651.97	6160.17	1.94	395923.95	1215800.59	N 48 2 39.00	W 103 34 40.75
	16889.00	87.85	88.61	10777.19	6284.61	654.31	6255.08	0.19	395922.47	1215895.51	N 48 2 39.03	W 103 34 39.36
	16984.00	88.81	87.19	10779.96	6379.52	657.79	6349.97	1.80	395922.12	1215990.46	N 48 2 39.06	W 103 34 37.96
	17079.00	90.13	86.54	10780.84	6474.51	662.99	6444.82	1.55	395923.49	1216085.44	N 48 2 39.11	W 103 34 36.57
	17174.00	90.66	88.60	10780.18	6569.47	667.01	6539.73	2.24	395923.69	1216180.42	N 48 2 39.15	W 103 34 35.17
	17205.00	89.60	89.55	10780.11	6600.44	667.51	6570.72	4.59	395922.94	1216211.41	N 48 2 39.16	W 103 34 34.71
	17269.00	90.13	89.63	10780.26	6664.32	668.79	6634.72	0.84	395920.82	1216275.37	N 48 2 39.16	W 103 34 33.77
	17301.00	88.72	89.07	10780.58	6696.27	668.34	6666.72	4.74	395919.90	1216307.35	N 48 2 39.16	W 103 34 33.30
	17364.00	88.99	89.23	10781.84	6759.18	669.27	6729.70	0.50	395918.29	1216370.32	N 48 2 39.17	W 103 34 32.37
	17458.00	88.72	88.57	10783.72	6853.06	671.07	6823.66	0.76	395916.31	1216464.27	N 48 2 39.19	W 103 34 30.99
	17553.00	88.55	87.57	10785.98	6947.98	674.27	6918.58	1.07	395915.68	1216559.23	N 48 2 39.22	W 103 34 29.59
	17648.00	89.25	88.44	10787.81	7042.91	675.58	7013.50	1.18	395915.16	1216654.21	N 48 2 39.25	W 103 34 28.20
	17744.00	90.40	89.92	10788.10	7138.78	678.95	7109.49	1.95	395912.67	1216750.16	N 48 2 39.27	W 103 34 26.78
	17838.00	89.78	90.74	10789.75	7232.54	678.41	7203.48	1.09	395908.34	1216844.06	N 48 2 39.26	W 103 34 25.40
	17933.00	90.48	91.80	10787.74	7327.17	676.31	7298.46	1.34	395902.41	1216938.86	N 48 2 39.24	W 103 34 24.00
	18028.00	89.52	91.66	10787.74	7421.73	673.44	7393.41	1.02	395985.72	1217033.62	N 48 2 39.21	W 103 34 22.61
	18123.00	87.85	92.18	10789.92	7516.23	670.26	7488.33	1.84	395888.71	1217128.33	N 48 2 39.18	W 103 34 21.21
	18218.00	88.11	91.46	10793.27	7610.72	667.24	7583.22	0.81	395881.88	1217223.02	N 48 2 39.15	W 103 34 19.81
	18314.00	88.99	90.97	10795.69	7606.32	675.69	7644.80	1.59	395875.98	1217318.80	N 48 2 39.13	W 103 34 18.40
	18409.00	89.96	90.19	10796.56	7801.04	664.24	7774.16	1.31	395871.19	1217413.66	N 48 2 39.24	W 103 34 7.21
	18504.00	87.41	89.90	10798.74	7895.79	664.17	7869.13	2.70	395867.29	1217508.54	N 48 2 39.25	W 103 34 15.60
	18600.00	88.20										

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° '")	Longitude (E/W ° '")
	1	25.000	20538.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Hole / Wade Federal 5300 31-30 2B MWD 0' to 20610'				
	1	20538.000	20610.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	Original Hole / Wade Federal 5300 31-30 2B MWD 0' to 20610'				



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)



CTB
Well File No.
228394-01

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

Notice of Intent

Approximate Start Date
February 15, 2015

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

Central production facility-commingle p

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

Footages	F	L	F	L	Qtr-Qtr	Section	Township	Range
						30	153 N	100 W
Field	Pool Bakken			County 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 North America, LLC respectfully requests approval to commingle oil and gas in a central production facility known as 5300 30-29 CTB with common ownership for the following wells:

Well file #28554 Wade Federal 5300 31-30 2B Lot3 Sec. 30 T153N R100W API 33-053-05995

Well file #28394 Wade Federal 5300 41-30 4T Lot4 Sec. 30 T153N R100W API 33-053-05943

Well file #28556 Wade Federal 5300 41-30 5T2 Lot4 Sec. 30 T153N R100W API 33-053-05997

Well file #28425 Wade Federal 5300 41-30 6B Lot4 Sec. 30 T153N R100W API 33-053-05954

Well file #28357 Wade Federal 5300 41-30 7T Lot4 Sec. 30 T153N R100W API 33-053-05998

Well file #28555 Wade Federal 5300 41-30 3T2 is being reevaluated and will not be commingled.

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. Oasis will allocate production measured at the central production facility to the various wells on the basis of isolated production tests utilizing oil, gas, and water meters on a test separator at the central production facility. Oasis will measure the production from each well separately each month for a minimum of three days. Oasis believes that such allocation will result in an accurate determination of production from each well. Tank vapor gas is being recovered and burned by a 98% DRE enclosed combuster.

Company Oasis Petroleum North America, LLC	Telephone Number (713) 770-6430
Address 1001 Fannin Suite 1500	
City Houston	State TX
Zip Code 77002	
Signature 	Printed Name David Copeland
Title Regulatory Specialist	Date January 24, 2015
Email Address dcopeland@oasispetroleum.com	

FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date 2-2-2015	
By 	
Title PETROLEUM ENGINEER	

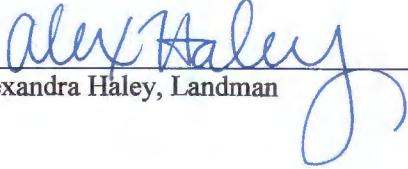
COMMINGLING AFFIDAVIT

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

The under signed, Alex Haley, of lawful age, being first duly sworn on her oath states that she is a duly authorized agent of Oasis Petroleum North America LLC, and that she has personal knowledge of the facts hereinafter set forth to make this Affidavit.

1. Sections 29 & 30, Township 153 North, Range 100 West, McKenzie County North Dakota constitute a spacing unit in accordance with the applicable orders for the Bakken pool.
2. Six wells have been drilled in the spacing unit, which are known as the Wade Federal 5300 31-30 2B, Wade Federal 5300 41-30 4T, Wade Federal 5300 41-30 5T2, Wade Federal 5300 41-30 6B, and the Wade Federal 5300 41-30 7T
3. By NDIC Order 23339 dated March 18, 2014, all oil and gas interest within the aforementioned spacing unit were pooled.
4. All Working Interests, Royalty Interests and Overriding Royalty Interests in the Wade Federal 5300 31-30 2B, -Wade Federal 5300 41-30 4T, Wade Federal 5300 41-30 5T2, Wade Federal 5300 41-30 6B, and the Wade Federal 5300 41-30 7T will be in common.

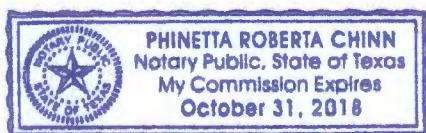
Dated this 22nd day of January, 2015

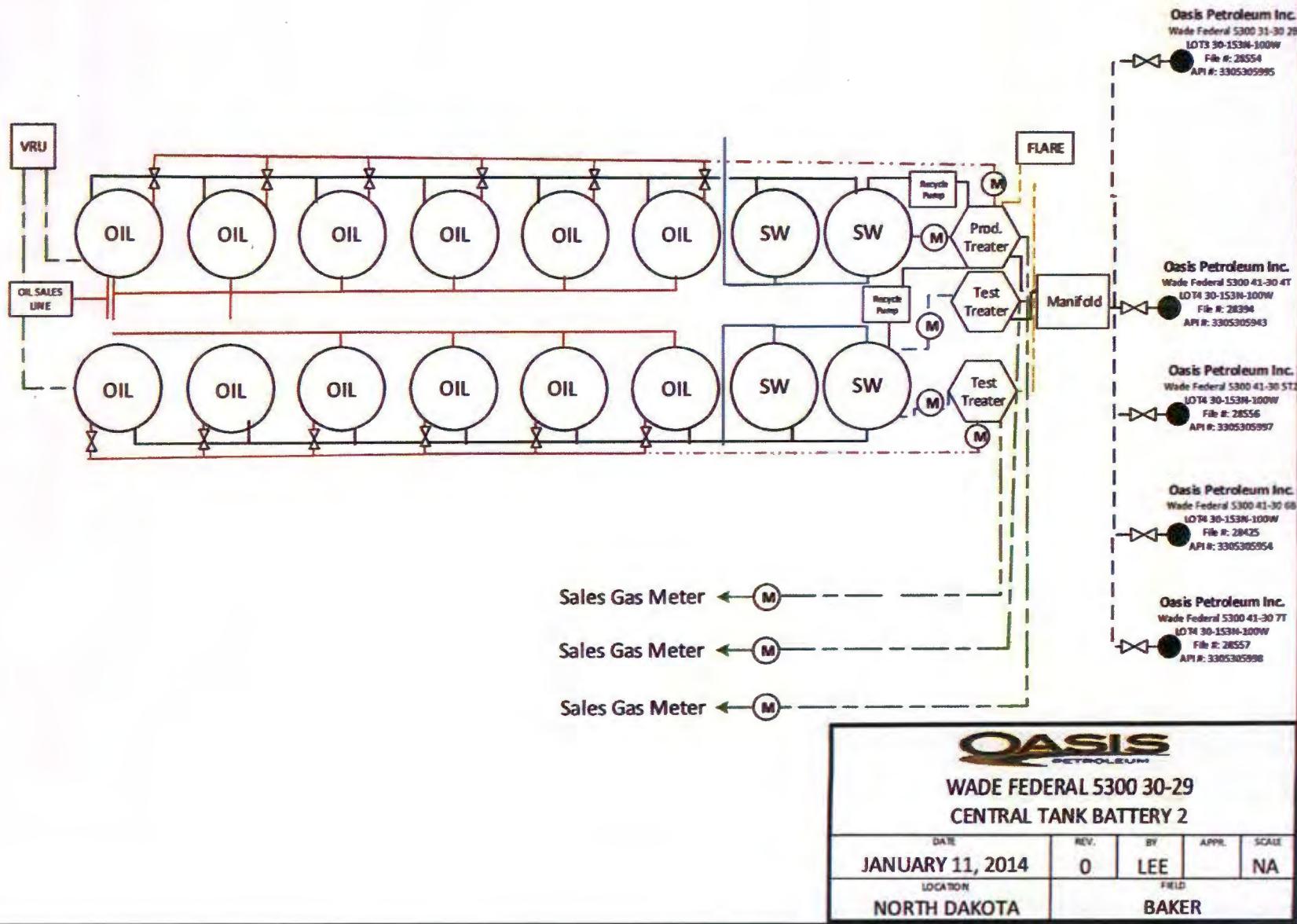

Alexandra Haley, Landman

STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

Subscribed to and sworn before me this 22nd day of January, 2015


PHINETTA ROBERTA CHINN
Notary Public, State of Texas
My Commission Expires: October 31, 2018

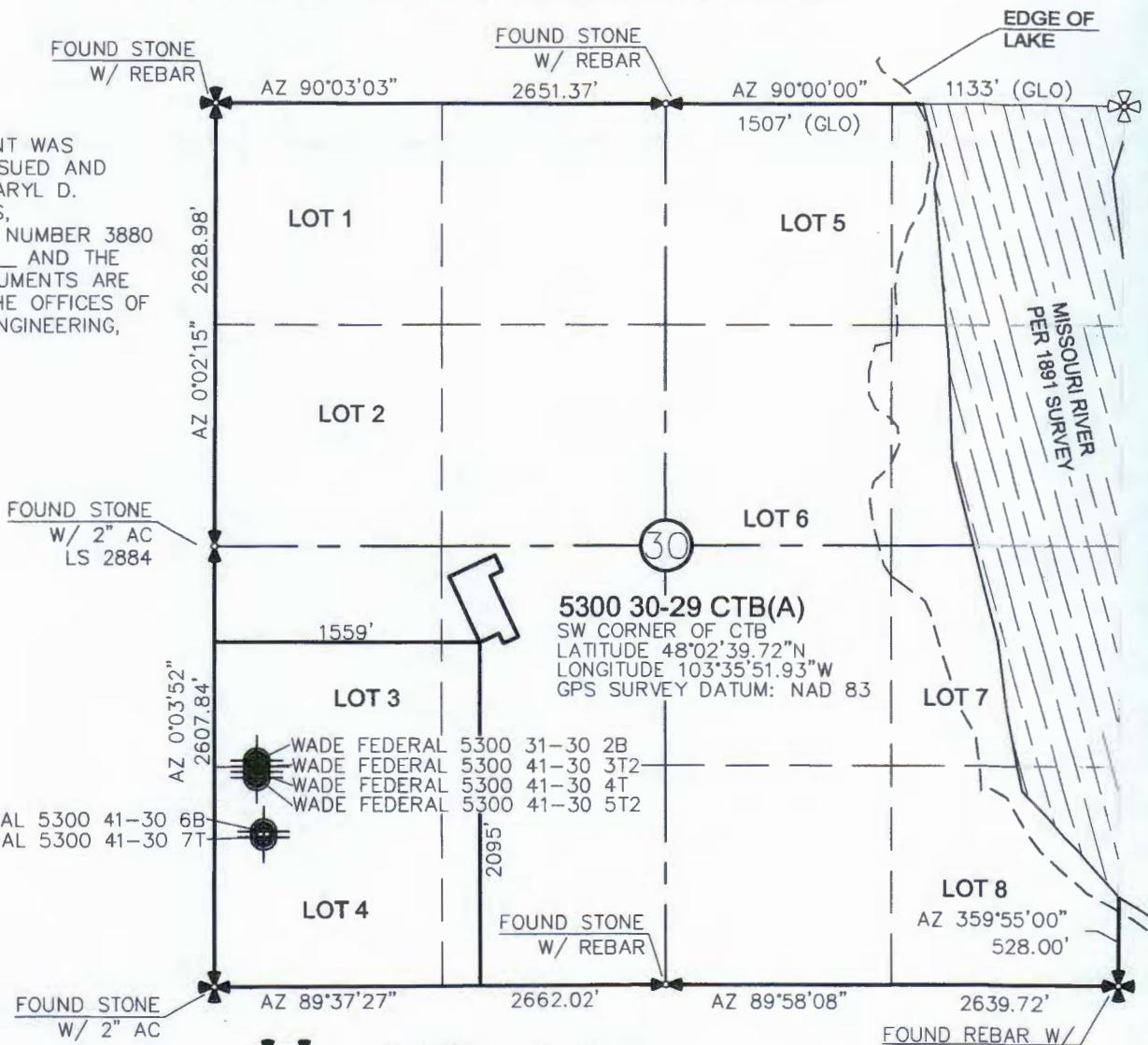




BATTERY LOCATION PLAT
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"5300 30-29 CTB(A)"
SECTION 30, T153N, R100W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

THIS DOCUMENT WAS
ORIGINALLY ISSUED AND
SEALED BY DARYL D.
KASEMAN, PLS,
REGISTRATION NUMBER 3880
ON 1/07/15 AND THE
ORIGINAL DOCUMENTS ARE
STORED AT THE OFFICES OF
INTERSTATE ENGINEERING,
INC.



VICINITY MAP



STAKED ON 3/25/14
VERTICAL CONTROL DATUM WAS BASED UPON
CONTROL POINT 705 WITH AN ELEVATION OF 2158.3'

THIS SURVEY AND PLAT IS BEING PROVIDED AT THE
REQUEST OF ERIC BAYES 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

© 2014, INTERSTATE ENGINEERING, INC.

1/5



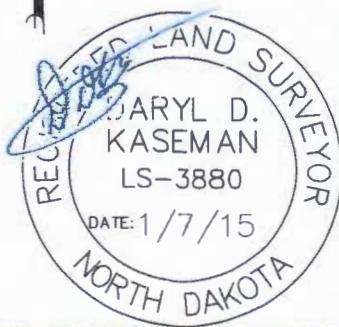
Professionals you need, people you trust

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

OASIS PETROLEUM NORTH AMERICA, LLC
BATTERY LOCATION PLAT
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	J.J.S.	Project No.:	S15-09-003
Checked By:	D.D.K.	Date:	JAN 2015

Revision No.	Date	By	Description



PAD LAYOUT
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"5300 30-29 CTB(A)"
SECTION 30, T153N, R100W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

THIS DOCUMENT WAS ORIGINALLY
ISSUED AND SEALED BY DARYL D.
KASEMAN, PLS, REGISTRATION
NUMBER 3880 ON 1/07/15 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.

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2/5

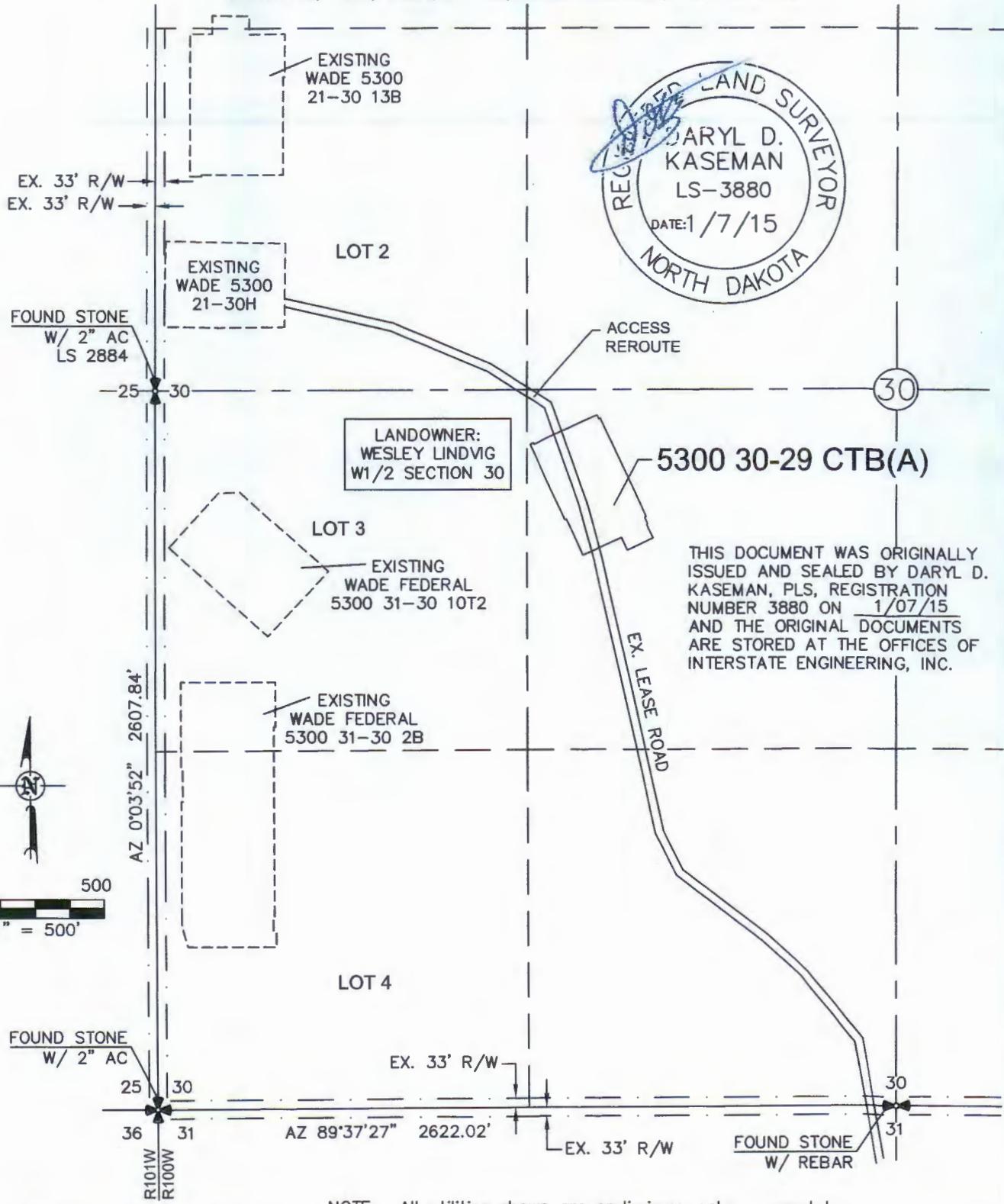


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Fax (406) 433-5618
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OASIS PETROLEUM NORTH AMERICA, LLC
PAD LAYOUT
SECTION 30, T153N, R100W

ACCESS APPROACH
 OASIS PETROLEUM NORTH AMERICA, LLC
 1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
 "5300 30-29 CTB(A)"
 SECTION 30, T153N, R100W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



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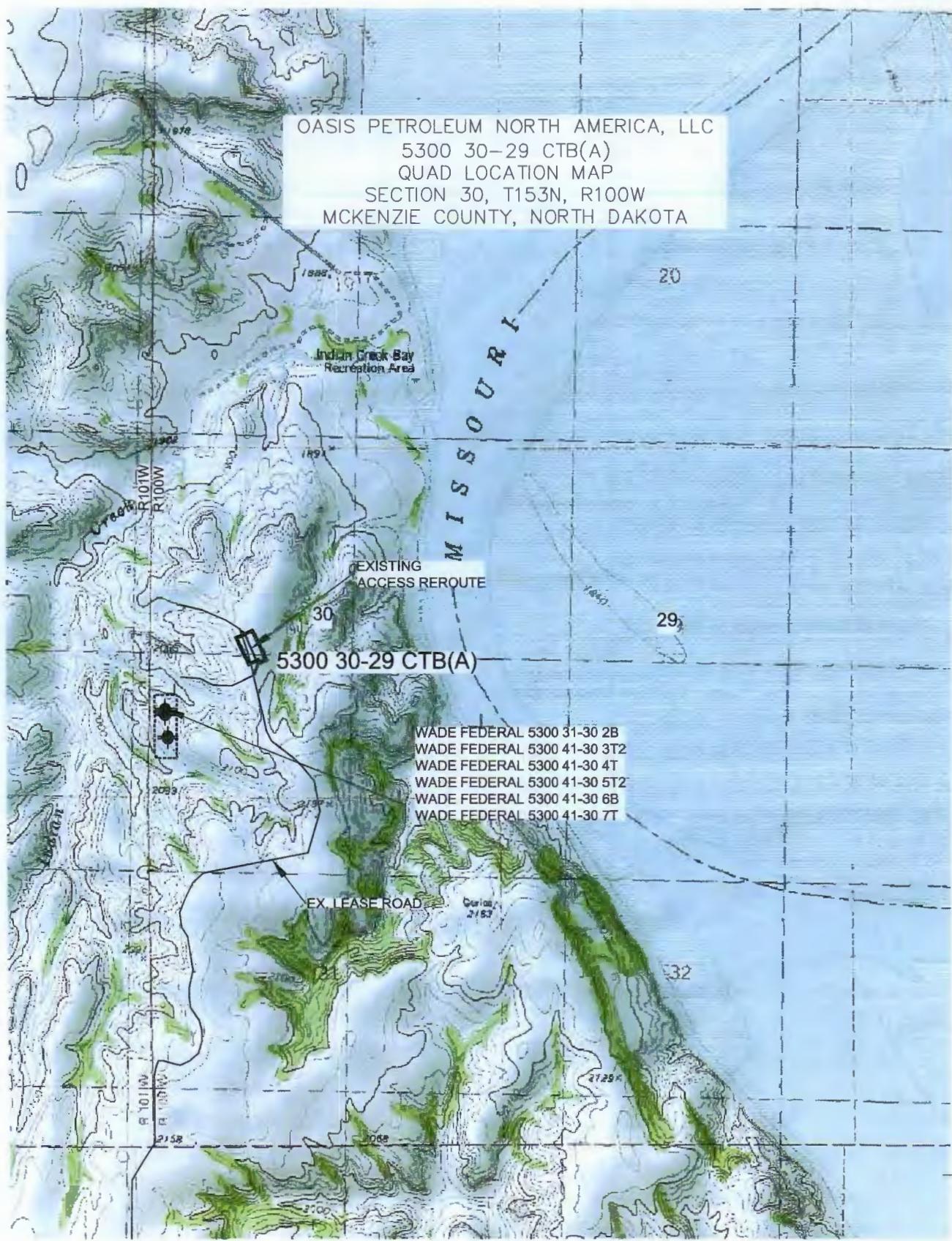
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 Fax (406) 433-5618
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Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC
 ACCESS APPROACH
 SECTION 30, T153N, R100W
 MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	J.J.S.	Project No.:	S15-09-003
Checked By:	D.D.K.	Date:	JAN 2015

Revision No.	Date	By	Description



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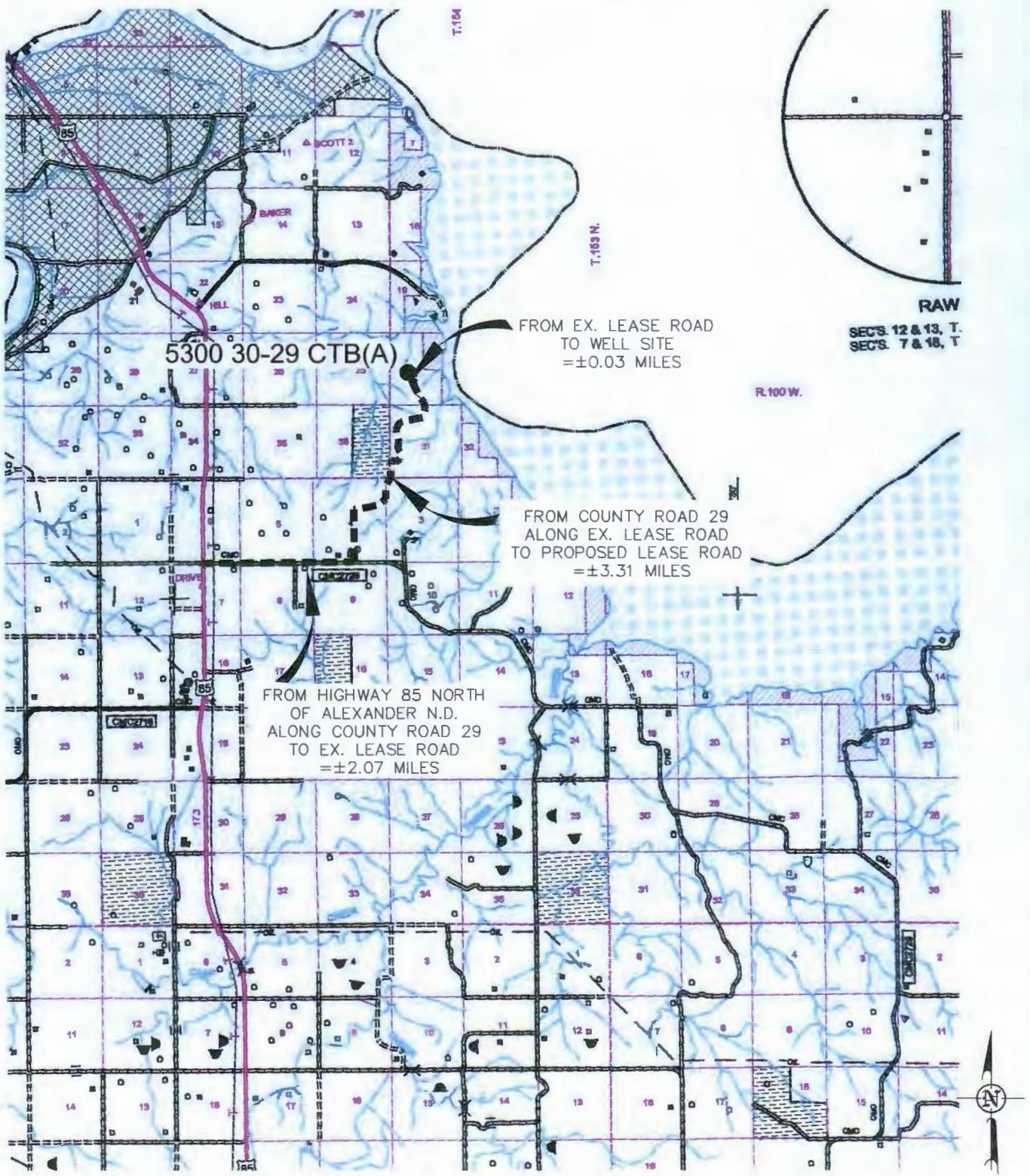
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC
QUAD LOCATION MAP
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: J.J.S. Project No.: S15-09-003
Checked By: D.D.K. Date: JAN 2015

Revision No.	Date	By	Description

COUNTY ROAD MAP
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"5300 30-29 CTB(A)"
SECTION 30, T153N, R100W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



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SCALE: 1" = 2 MILE

5/5



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Sidney, Montana 59270
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OASIS PETROLEUM NORTH AMERICA, LLC
COUNTY ROAD MAP
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

Own By: J.J.S. Project No.: S15-09-003

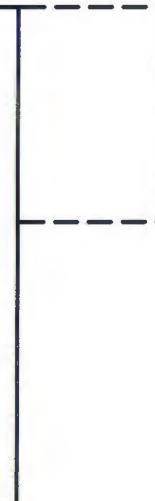
Checked By: D.D.K. Date: JAN 2015

LAT/LONG PAD CORNERS

48°02'44.48"N
103°35'51.68"W



48°02'40.64"N
103°35'49.00"W



5300 30-29 CTB(A)

48°02'43.56"N
103°35'54.61"W

48°02'39.72"N
103°35'51.93"W





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.

28976

28554

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

 Notice of Intent

Approximate Start Date
September 14, 2014

 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 Diagnosis
- Redrilling or Repair
- Casing or Liner
- Plug Well
- Supplemental History
- Temporarily Abandon
- Other **offsite pit**

 Spill Report Shooting Acidizing Fracture Treatment Change Production Method Reclamation

Well Name and Number

Wade Federal 5300 21-30 12T

Footages	Qtr-Qtr	Section	Township	Range	
1640 F N L	270 F W L	SWNW	30	153 N	100 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 North America LLC respectfully requests to use an offsite pit for this well. The following wells will also use this pit:

Wade Federal 5300 31-30 2B — 28554
 Wade Federal 5300 41-30 3T2 — 28555
 Wade Federal 5300 41-30 4T — 28394
 Wade Federal 5300 41-30 5T2 — 28556
 Wade Federal 5300 41-30 6B — 28425-TH
 Wade Federal 5300 41-30 7T — 28557
 Wade Federal 5300 41-30 8T2 — 28558-TH
 Wade Federal 5300 41-30 9B — 28744
 Wade Federal 5300 21-30 13B — 28978
 Wade Federal 5300 21-30 14T2 — 28977

Attached are the plats for the offsite pit location.

Company Oasis Petroleum North America LLC	Telephone Number 281-404-9589	
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature <i>Sonja Rolfs</i>	Printed Name Sonja Rolfs	
Title Regulatory Analyst	Date August 20, 2014	
Email Address srolfs@oasispetroleum.com		

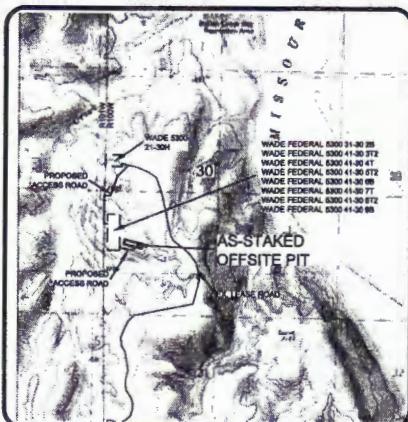
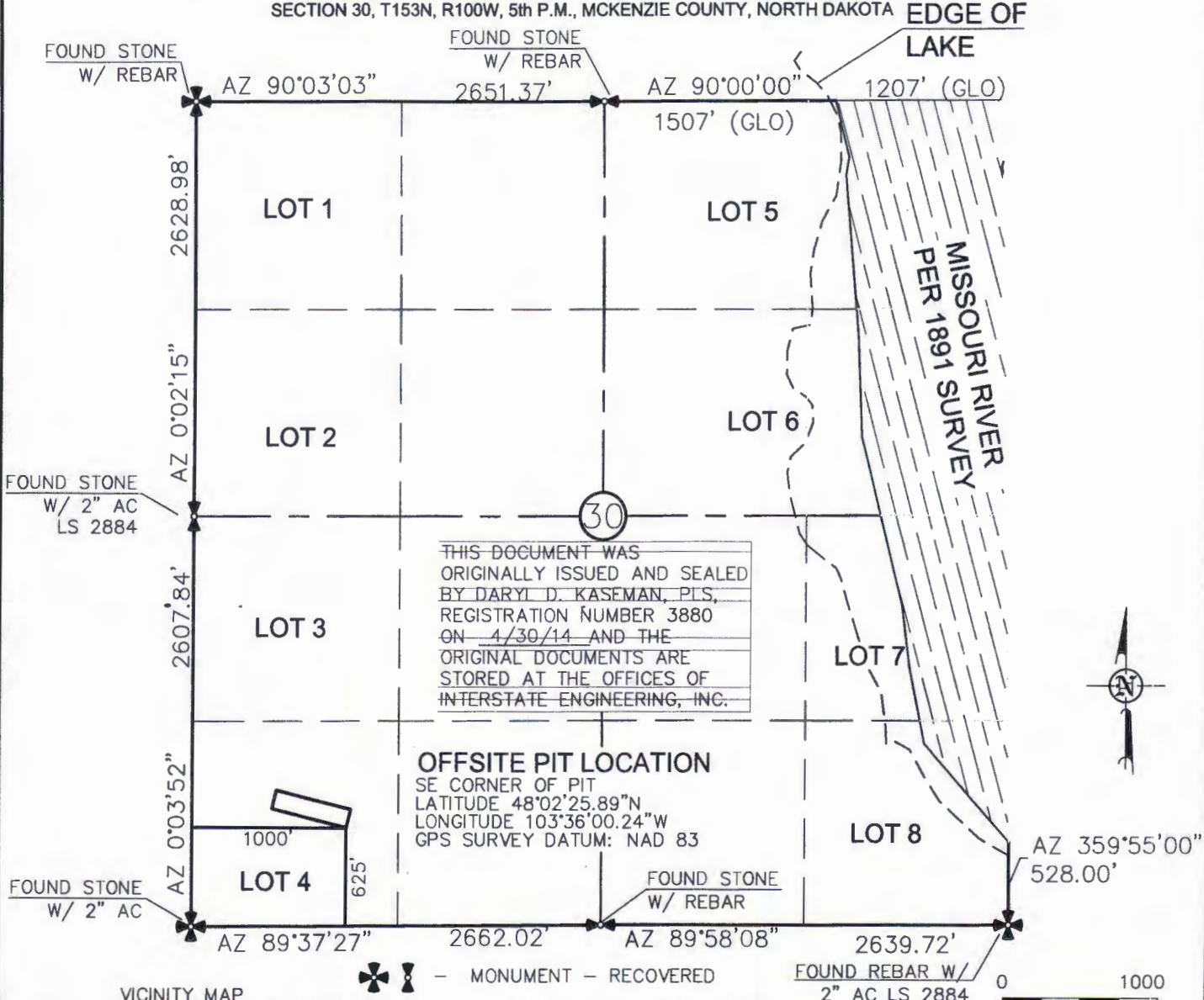
FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date 2-9-15	
By <i>WPS</i>	
Title <i>WPS</i>	

OFFSITE PIT LOCATION PLAT

OASIS PETROLEUM NORTH AMERICA, LLC

1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"AS-STAKED OFFSITE PIT FOR WADE FEDERAL 5300 31-30 2B, WADE FEDERAL 5300 41-30 3T2,
WADE FEDERAL 5300 41-30 4T, WADE FEDERAL 5300 41-30 5T2, WADE FEDERAL 5300 41-30 6B,
WADE FEDERAL 5300 41-30 7T, WADE FEDERAL 5300 41-30 8T2, & WADE FEDERAL 5300 41-30 9B"
625 FEET FROM SOUTH LINE AND 1000 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA EDGE



VICINITY MAP

-  - MONUMENT - RECOVERED
 - MONUMENT - NOT RECOVERED

STAKED ON 4/30/14
VERTICAL CONTROL DATUM WAS BASED UPON
CONTROL POINT 705 WITH AN ELEVATION OF 2158.3'

THIS SURVEY AND PLAT IS BEING PROVIDED AT THE REQUEST OF ERIC BAYES 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



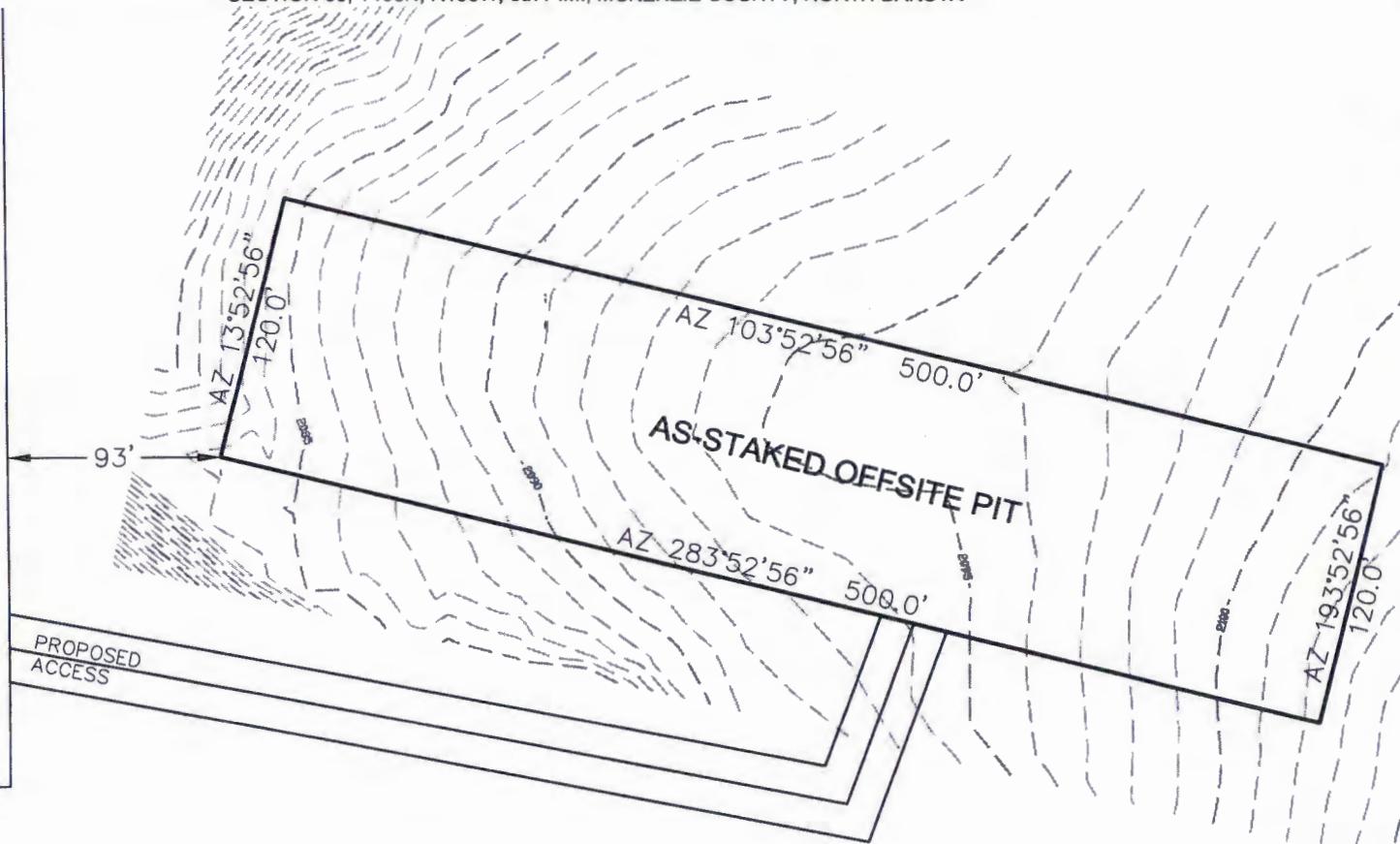
PAD LAYOUT

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

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WADE FEDERAL 5300 41-30 4T, WADE FEDERAL 5300 41-30 5T2, WADE FEDERAL 5300 41-30 6B,
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625 FEET FROM SOUTH LINE AND 1000 FEET FROM WEST LINE

SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA

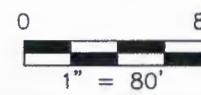
WADE FEDERAL
5300 31-30 2B
WADE FEDERAL
5300 41-30 3T2
WADE FEDERAL
5300 41-30 4T
WADE FEDERAL
5300 41-30 5T2
WADE FEDERAL
5300 41-30 6B
WADE FEDERAL
5300 41-30 7T
WADE FEDERAL
5300 41-30 8T2
WADE FEDERAL
5300 41-30 9B



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PLS, REGISTRATION NUMBER 3880 ON
4/30/14 AND THE ORIGINAL
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NOTE: All utilities shown are preliminary only, a complete
utilities location is recommended before construction.



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OASIS PETROLEUM NORTH AMERICA, LLC	Revision No.	Date	By	Description
SECTION 30, T153N, R100W				

MCKENZIE COUNTY, NORTH DAKOTA	Project No.	AIR DATE
	S13-08-381-09	APRIL 2014

B.H.	D.D.K.
Drawn By:	Checked By:

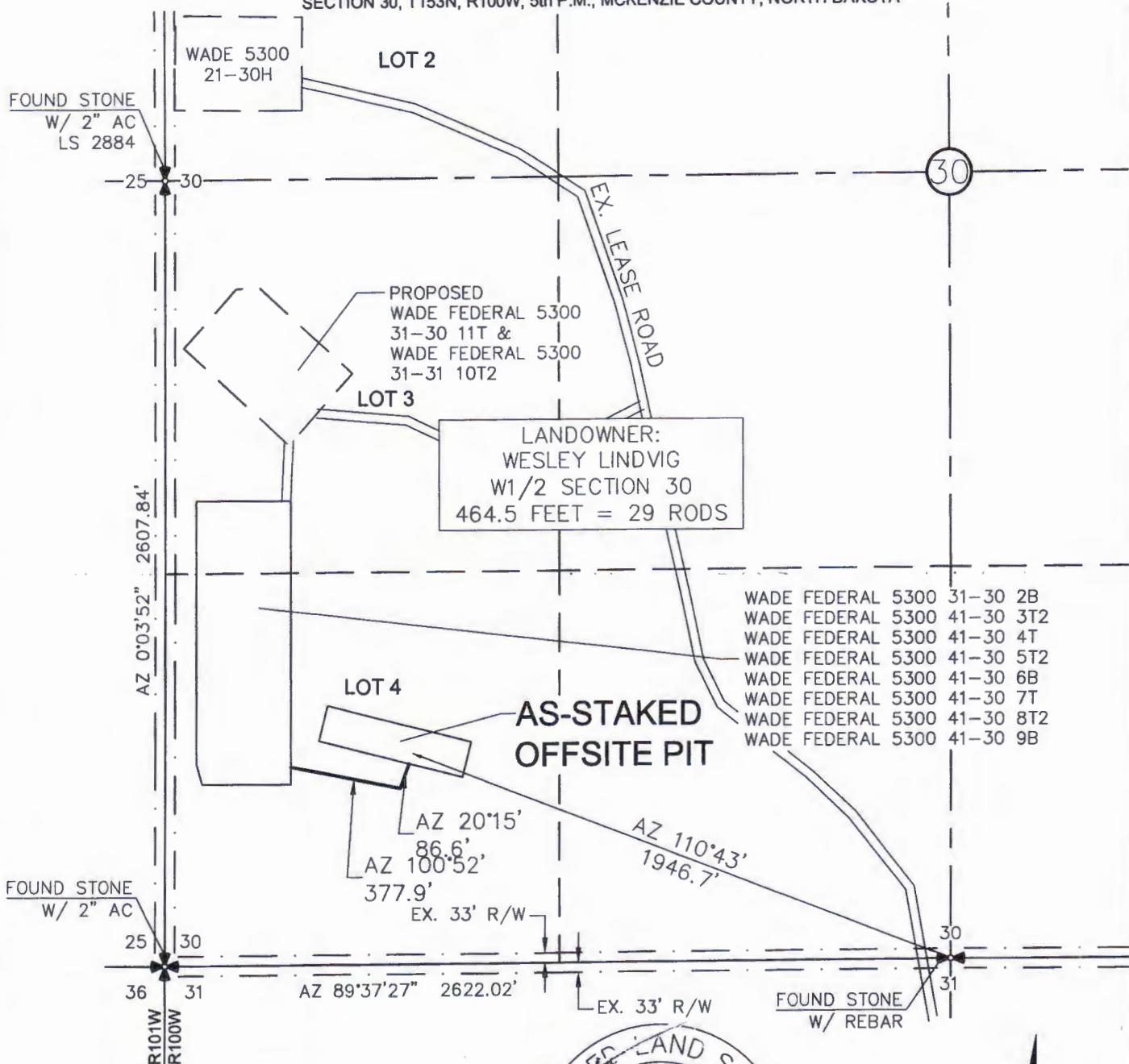
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P.O. Box 648 425 East Main Street Sidney, Montana 89270 Ph: (406) 433-5617 Fax: (406) 433-5618 www.interstateeng.com	

ACCESS APPROACH

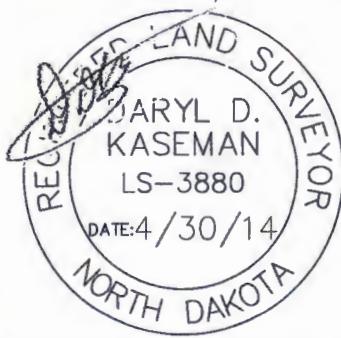
OASIS PETROLEUM NORTH AMERICA, LLC

1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"AS-STAKED OFFSITE PIT FOR WADE FEDERAL 5300 31-30 2B, WADE FEDERAL 5300 41-30 3T,
WADE FEDERAL 5300 41-30 4T, WADE FEDERAL 5300 41-30 5T2, WADE FEDERAL 5300 41-30 6B,
WADE FEDERAL 5300 41-30 7T, WADE FEDERAL 5300 41-30 8T2, & WADE FEDERAL 5300 41-30 9B"
625 FEET FROM SOUTH LINE AND 1000 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA



THIS DOCUMENT WAS ORIGINALLY
ISSUED AND SEALED BY DARYL D.
KASEMAN, PLS, REGISTRATION NUMBER
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<p>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</p>	<p>OASIS PETROLEUM NORTH AMERICA, LLC ACCESS APPROACH SECTION 30, T153N, R100W</p> <p>MCKENZIE COUNTY, NORTH DAKOTA</p>
<p>Drawn By: <u>B.H.H.</u></p>	<p>Project No.: <u>S13-09-381.09</u></p>
<p>Checked By: <u>D.D.K.</u></p>	<p>Date: <u>APRIL 2014</u></p>

OFF-SITE PIT AGREEMENT

In consideration of the sum of [REDACTED] paid by Oasis Petroleum North America LLC ("Oasis") the undersigned surface owners, Wesley Lindvig and Barbara Lindvig, for themselves and their heirs, successors, administrators and assigns, hereby acknowledge the receipt and sufficiency of said payment in full and complete settlement for and as a release of all claim for loss, damage or injury to the hereafter described surface property arising out of the off-site cuttings pit, in which the cuttings from the Wade Federal 5300 21-30 13B, Wade Federal 5300 21-30 14T2 wells will be buried, located on the approximately two (2.0) acre tract of land identified on the plat attached hereto as Exhibit "A" and which is situated on the following described real property located in McKenzie County, State of North Dakota, towit:

Township 153 North, Range 100 West, 5th P.M.
Section 30: Lots 3 & 4 a/k/a W½SW½

The undersigned knows that Oasis Petroleum North America LLC is the operator and will be drilling the Wade Federal 5300 21-30 13B, Wade Federal 5300 21-30 14T2 wells. The undersigned further states that they are fully aware that the cuttings generated from the drilling of the Wade Federal 5300 21-30 13B, Wade Federal 5300 21-30 14T2 wells will be buried in the pit on the above described location.

Dated this 19 day of May, 2014.

SURFACE OWNER(S)

Wesley Lindvig
Wesley Lindvig
Barbara J. Lindvig
Barbara Lindvig

for W.G.L.
[Signature]

Location will be fenced after construction.
Pit will be reclaimed to Owners Satisfaction
for W.G.L.

ACKNOWLEDGMENT INDIVIDUAL

State of North Dakota)

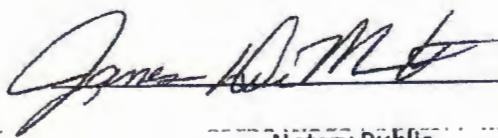
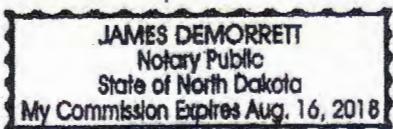
)

County of McKenzie)

BE IT REMEMBERED, That on this 19 day of May, 2014 before me, a Notary Public, in and for said County and State, personally appeared Wesley Lindvig and Barbara Lindvig, to me known to be the identical persons described in and who executed the within and foregoing instrument and acknowledged to me to that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my official signature and affixed my notarial seal, the day and year last above written.

My Commission expires:



Notary Public



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)

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



Well File No	28394
	28405
	28554
	28555
	28556
	28557
	28558
	28744

<input type="checkbox"/> Notice of Intent	Approximate Start Date	<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.		<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 type="checkbox"/> Other	

Well Name and Number Wade Federal 5300 41-30 4T + See Details				
Footages 1263 F S L	Qtr-Qtr 240 F W L	Section SWSW	Township 30	Range 153 N 100 W
Field	Pool Bakken	County McKenzie		

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

Oasis Petroleum respectfully requests to use an offsite pit for the wells listed below. We are requesting to use an offsite pit because a pit wont fit on location with a rig anchor and the land adjacent is too rough. Attached are the plats.

Wade Federal 5300 31-30 2B - 28554
Wade Federal 5300 41-30 3T2 - 28555
Wade Federal 5300 41-30 4T - 28394
Wade Federal 5300 41-30 5T2 - 28556
Wade Federal 5300 41-30 6B - 28405
Wade Federal 5300 41-30 7T - 28557
Wade Federal 5300 41-30 8T2 - 28558
Wade Federal 5300 41-30 9B - 28744

Company Oasis Petroleum North America LLC	Telephone Number 281-404-9491	
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature 	Printed Name Brandi Terry	
Title Regulatory Specialist	Date May 12, 2014	
Email Address bterry@oasispetroleum.com		

FOR STATE USE ONLY

<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date 12-23-14	
By 	
Title 	

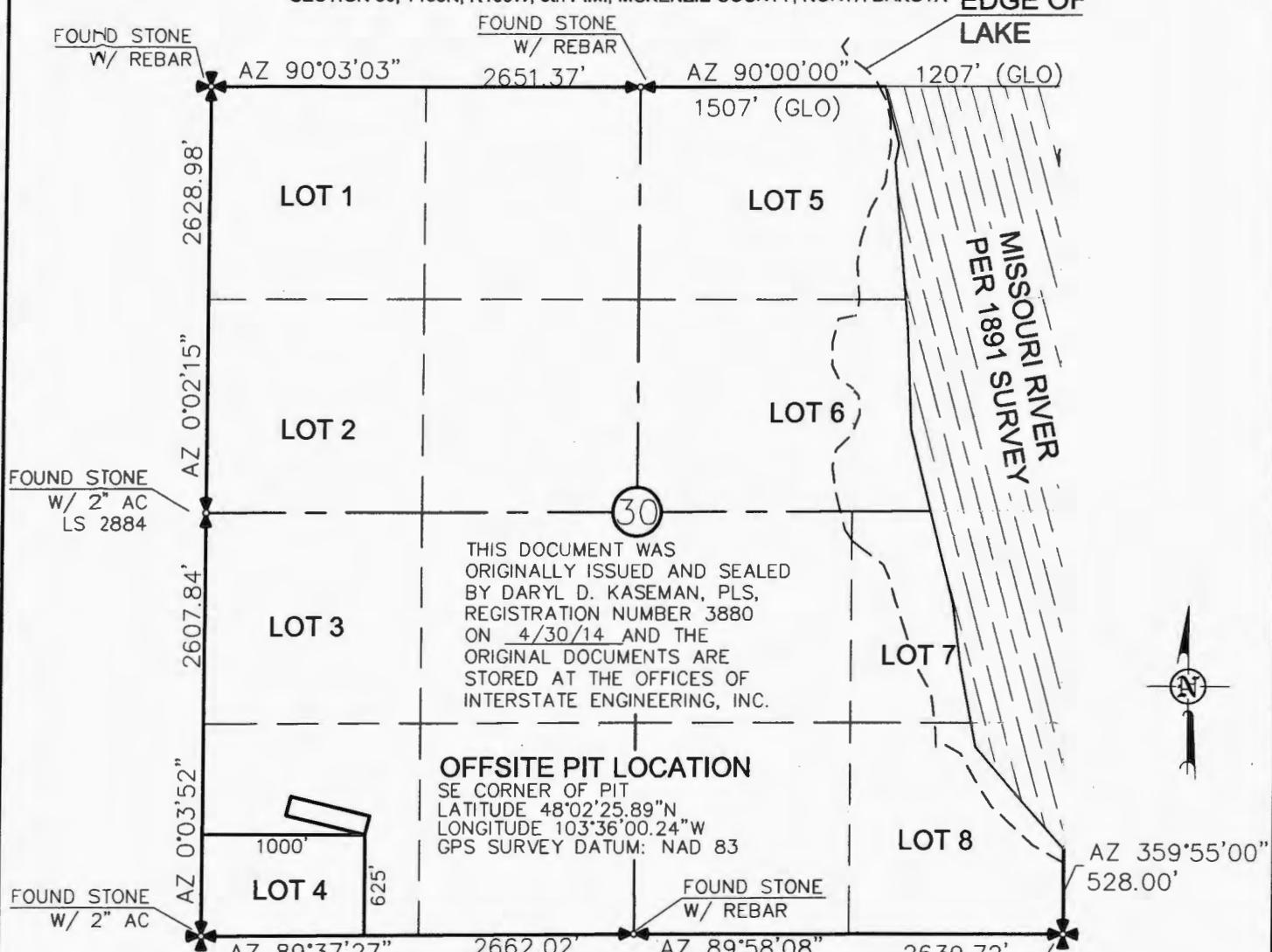
OFFSITE PIT LOCATION PLAT
OASIS PETROLEUM NORTH AMERICA, LLC

1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"AS-STAKED OFFSITE PIT FOR WADE FEDERAL 5300 31-30 2B, WADE FEDERAL 5300 41-30 3T2,
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WADE FEDERAL 5300 41-30 7T, WADE FEDERAL 5300 41-30 8T2, & WADE FEDERAL 5300 41-30 9B"
625 FEET FROM SOUTH LINE AND 1000 FEET FROM WEST LINE

SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA

**EDGE OF
LAKE**



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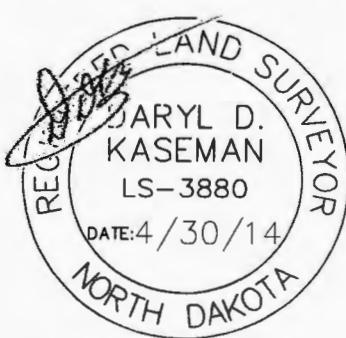
OFFSITE PIT LOCATION PLAT

SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H. Project No.: S13-09-381.09
Checked By: D.D.K. Date: APRIL 2014

Revision No. Date By Description

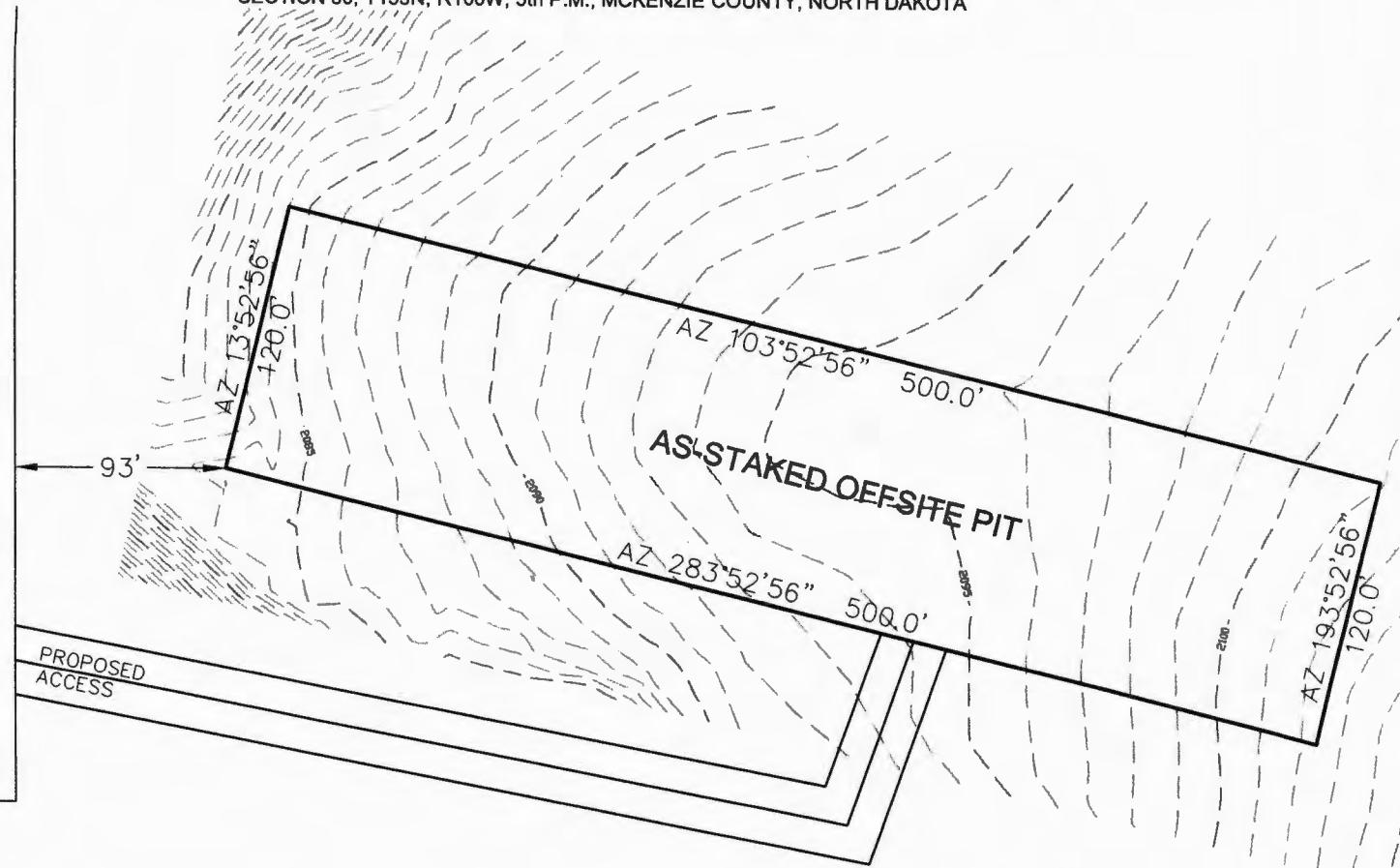


PAD LAYOUT

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

"AS-STAKED OFFSITE PIT FOR WADE FEDERAL 5300 31-30 2B, WADE FEDERAL 5300 41-30 3T2,
WADE FEDERAL 5300 41-30 4T, WADE FEDERAL 5300 41-30 5T2, WADE FEDERAL 5300 41-30 6B,
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625 FEET FROM SOUTH LINE AND 1000 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA

WADE FEDERAL
5300 31-30 2B
WADE FEDERAL
5300 41-30 3T2
WADE FEDERAL
5300 41-30 4T
WADE FEDERAL
5300 41-30 5T2
WADE FEDERAL
5300 41-30 6B
WADE FEDERAL
5300 41-30 7T
WADE FEDERAL
5300 41-30 8T2
WADE FEDERAL
5300 41-30 9B



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PLS, REGISTRATION NUMBER 3880 ON
4/30/14 AND THE ORIGINAL
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0 80
1" = 80'

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2/3
SHEET NO.

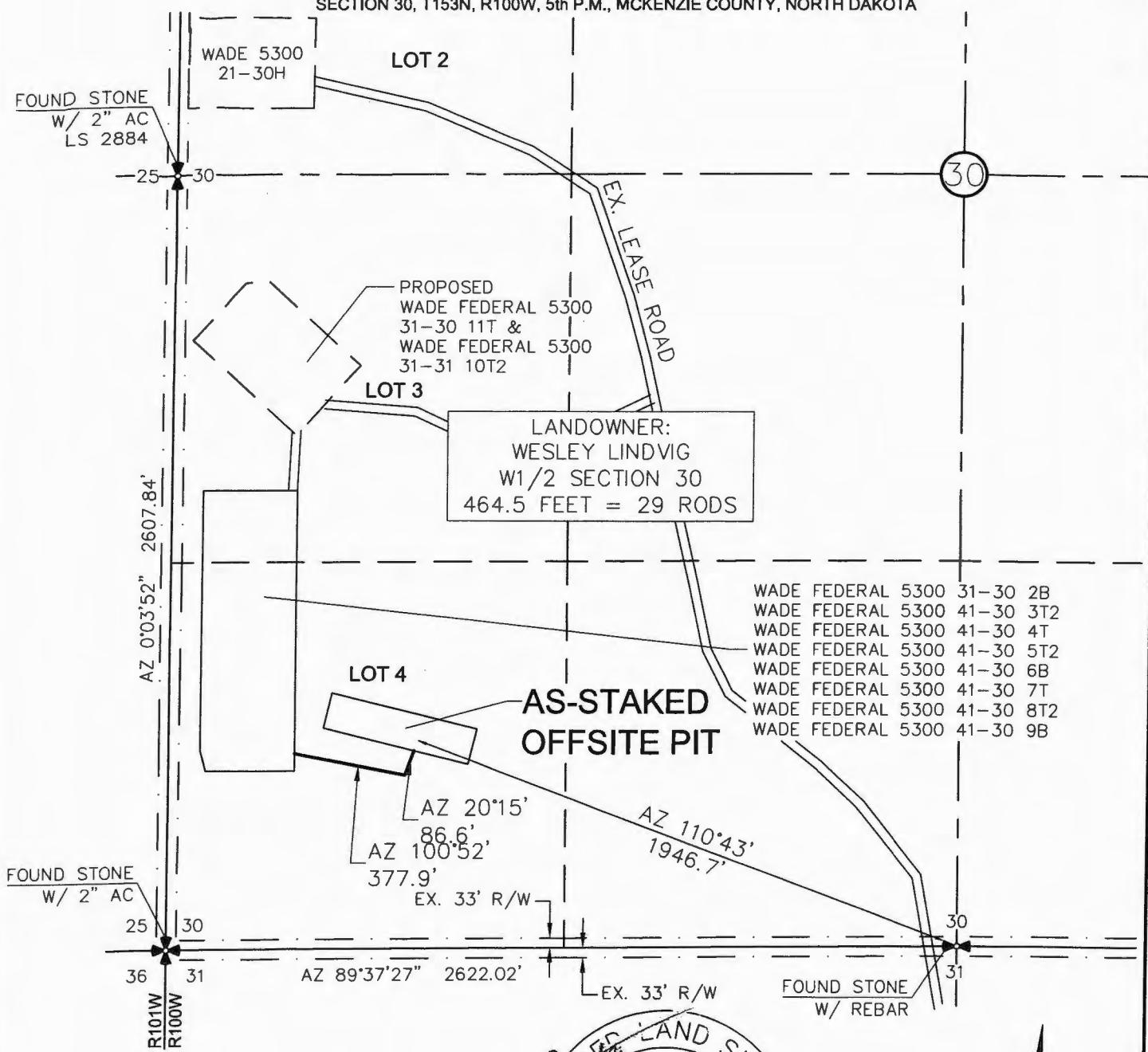
OASIS PETROLEUM NORTH AMERICA, LLC	Section No.	Date	By	Description
PAD LAYOUT				
SECTION 30, T153N, R100W				
MCKENZIE COUNTY, NORTH DAKOTA				
Project No.: S15-063-31-09				
Drawn By: B.H.H.	Checked By: D.D.K.	Date: APRIL 2014		

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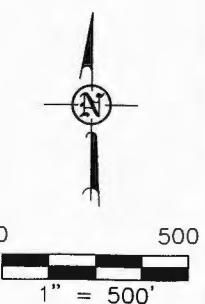
ACCESS APPROACH

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WADE FEDERAL 5300 41-30 4T, WADE FEDERAL 5300 41-30 5T2, WADE FEDERAL 5300 41-30 6B,
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ISSUED AND SEALED BY DARYL D.
KASEMAN, PLS, REGISTRATION NUMBER
3880 ON 4/30/14 AND THE
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THE OFFICES OF INTERSTATE
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OASIS PETROLEUM NORTH AMERICA, LLC
ACCESS APPROACH
SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	B.H.H.	Project No.:	S13-09-381.06
Checked By:	D.D.K.	Date:	APRIL 2014

Revision No.	Date	By	Description

3/3

 **INTERSTATE**
ENGINEERING

SHEET NO.

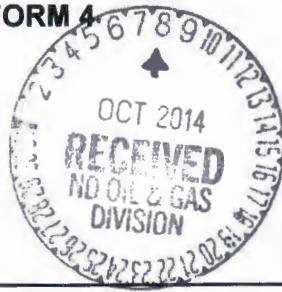
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SUNDRY NOTICES AND REPORTS ON WELLS - FORM 4

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.
28554



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

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date October 6, 2014	<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 Casing changes	

Well Name and Number

Wade Federal 5300 31-30 2B

Footages	Qtr-Qtr	Section	Township	Range
1329 F S L	240 F W L	LOT3	30	153 N 100 W
Field	Pool Bakken	County 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
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DETAILS OF WORK

Oasis Petroleum respectfully requests approval to change the casing design for the above referenced well:

Surface Casing to 13 3/8" casing (previously 9 5/8" casing);

Contingency Surface Casing of 9 5/8" set at 6400',

7" Intermediate Casing and 4 1/2" liner will remain the same.

Attached are the revised GeoProg, 8 Point Drill plan, Plot and Plan.

Company Oasis Petroleum North America LLC	Telephone Number 281-404-9589	
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature <i>Sonja Rolfes</i>	Printed Name Sonja Rolfes	
Title Regulatory Specialist	Date October 6, 2014	
Email Address srolfes@oasispetroleum.com		

FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date	<i>10/13/14</i>
By	<i>Hannah K. Eubel</i>
Title	Petroleum Resource Specialist

DRILLING PLAN								
OPERATOR	Oasis Petroleum	COUNTY/STATE	McKenzie Co., ND					
WELL NAME	Wade Federal 5300 21-30H	RIG	Nabors 483					
WELL TYPE	Horizontal Middle Bakken							
LOCATION	NW SW 30-153N-100W	Surface Location (survey plat):	1329'					
EST. T.D.	20,693'		240' FWL	GROUND ELEV:	2,045'	Sub Height:	25'	
TOTAL LATERAL:	9,699'			KB ELEV:	2,070'			
MARKER	TVD	Subsea TVD	LOGS:	Type	Interval			
Pierre	NDIC MAP	1,920	150	OH Logs: Request Log waiver based on the Wade Federal 5300 21-30H 2,150' N of surface location				
Greenhorn		4,566	-2,496	CBL/GR: Above top of cement/GR to base of casing				
Mowry		4,969	-2,899	MWD GR: KOP to lateral TD				
Dakota		5,391	-3,321					
Rierdon		6,407	-4,337	DEVIATION: Surf: 3 deg. max , 1 deg / 100'; svry every 500'				
Durham Salt		6,896	-4,826	Prod: 5 deg. max , 1 deg / 100'; svry every 100'				
Durham Salt Base		6,942	-4,872					
Pine Salt		7,205	-5,135					
Pine Salt Base		7,229	-5,159					
Opeche Salt		7,291	-5,221					
Opeche Salt Base		7,371	-5,301					
Amsden		7,615	-5,545					
Tyler		7,771	-5,701					
Otter/Base Minnelusa		7,994	-5,924	DST'S: None planned				
Kibbey Lime		8,336	-6,266					
Charles Salt		8,484	-6,414	CORES: None planned				
Base Last Salt		9,163	-7,093					
Mission Canyon		9,377	-7,307					
Lodgepole		9,926	-7,856					
False Bakken		10,656	-8,586	MUDLOGGING: Two-Man: Begin 200' above Kibbey				
Upper Bakken Shale		10,668	-8,598	30' samples in curve and lateral				
Middle Bakken (Top of Target)		10,695	-8,625					
Middle Bakken (Base of target)		10,706	-8,636					
Lower Bakken Shale		10,719	-8,649					
Threeforks		10,744	-8,674					
Est. Dip Rate:								
Max. Anticipated BHP:	4,645	Surface Formation: Glacial till						
MUD:	Interval	Type	WT	Vis	WL	Remarks		
Surface:	0' -	2,100' FW	8.4-9.0	28-32	NC	Circ Mud Tanks		
Intermediate:	2,100' -	10,994' Invert	9.5-10.4	40-50	30+HtHp	Circ Mud Tanks		
Lateral:	10,994' -	20,693' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks		
CASING:	Size	Wt ppf	Hole	Depth	Cement	WOC	Remarks	
Surface:	13-3/8"	54.5#	17-1/2"	2,100'	To Surface	12	100' into Pierre	
Intermediate (Dakota):	9-5/8"	40#	12-1/4"	6,400'	To Surface	24	Set Casing across Dakota	
Intermediate:	7"	32#	8-3/4"	10,994'	3891	24	1500' above Dakota	
Production Liner:	4.5"	13.5#	6"	20,693'	TOL @ 10,174'		50' above KOP	
PROBABLE PLUGS, IF REQ'D:								
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI		
Surface:	2,100	2,100	1329 FSL	340 FWL	Sec. 30 T153N R100W	Survey Company:		
KOP:	10,224'	10,224'	1379 FSL	240 FWL	Sec. 30 T153N R100W	Build Rate: 12 deg /100'		
EOC:	10,971'	10,701'	1612 FSL	653 FWL	Sec. 30 T153N R100W	60.6		
Casing Point:	10,994'	10,701'	1624 FSL	674 FWL	Sec. 30 T153N R100W	60.6		
Middle Bakken Lateral TD:	20,693'	10,761'	1994 FSL	210 FEL	Sec. 29 T153N R100W	90.0		
Comments:								
Request Log waiver based on the Wade Federal 5300 21-30H 2,150' N of surface location								
'No frac string planned'								
35 packers, 20 sleeves								
 Oasis Petroleum does not use Diesel Fuel, as defined by the US EPA in the list below, in our hydraulic fracture operations. 68334-30-5 (Primary Name: Fuels, diesel) 68478-34-8 (Primary Name: Fuels, diesel, No. 2) 68476-30-2 (Primary Name: Fuel oil No. 2) 68476-31-3 (Primary Name: Fuel oil, No. 4) 8008-20-6 (Primary Name: Kerosene)								
Geology: N. Gabelman	1/20/2014	Engineering: C. Gilbert	1/29/14					

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

Oasis Petroleum intends to drill this well according to the planned program outlined below.

1. Estimated Tops of Important Geologic Markers

MARKER		TVD
Pierre	NDIC MAP	1,920
Greenhorn		4,566
Mowry		4,969
Dakota		5,391
Rierdon		6,407
Dunham Salt		6,896
Dunham Salt Base		6,942
Pine Salt		7,205
Pine Salt Base		7,229
Opeche Salt		7,291
Opeche Salt Base		7,371
Amsden		7,615
Tyler		7,771
Otter/Base Minnelusa		7,994
Kibbey Lime		8,336
Charles Salt		8,484
Base Last Salt		9,163
Mission Canyon		9,377
Lodgepole		9,926
False Bakken		10,656
Upper Bakken Shale		10,668
Middle Bakken (Top of Target)		10,695
Middle Bakken (Base of target)		10,706
Lower Bakken Shale		10,719
Threeforks		10,744

(Potential H2S In Mission Canyon)

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

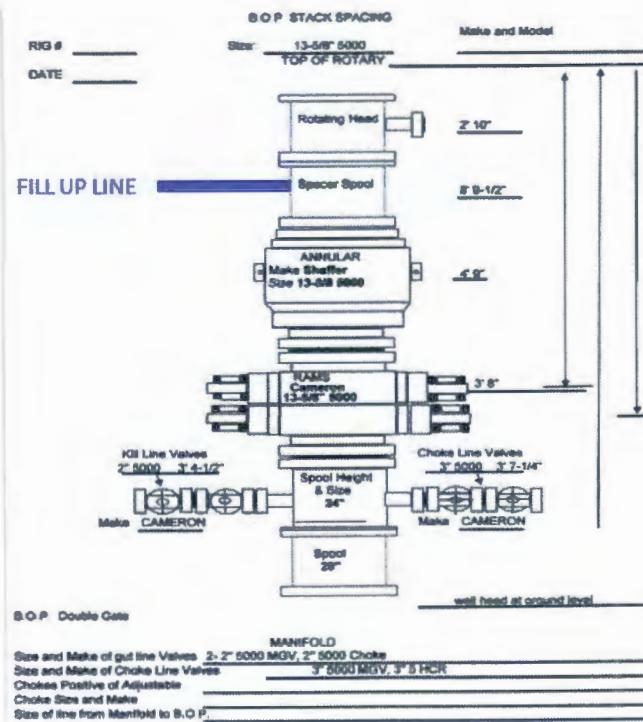
2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth (TVD)</u>
Water	Dakota	5,391'
Oil	Mission Canyon (Potential H2S)	9,377'
Oil	Lodgepole	9,926'
Oil	Middle Bakken	10,695'

3. Pressure Control Equipment:

After 13-3/8" casing will be set at 2,100' (at least 100' into the Pierre Shale), an 11", 5M, double ram BOP with annular preventer, 5M psi kill lines, choke manifold and rotating head will be used and installed on a 13-3/8" x 11", 5M wellhead (A-Section) to drill from 2,100' to 10,994' MD (7" intermediate casing point). See diagram below.

Note: 13-3/8" BOP to be rented as for hole size if 12-1/4" hole is necessary as contingency. See supplemental letter concerning 9-5/8" contingency.



At intermediate casing point, a 5M psi wellhead (B-section) will be installed. Pipe rams and Kelly will be changed out for 4" drill pipe and related equipment that will be used in the lateral from 10,994' to a total

OASIS PETROLEUM NORTH AMERICA LLC

Drilling Program

Wade Federal 5300 31-30 2B

Section 30 T153N R100W

McKenzie County, ND

depth of 20,693'. The BOPE and related equipment will meet the requirements of the 5M psi system and as outlined in Onshore Order II.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

Surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" x 5M psi BOP and 5M psi annular will be nipped up on the surface casing. Install test plug and pressure test annular preventer to 250 psi low and 2500 psi high or 50% of rated working pressure and BOPE 250 psi low and to 5000 psi high for 10 minutes each prior to drill out. The surface casing will be tested to 1500 psi.

Intermediate casing will be tested to the greater of 1500 psi or .22 psi/ft. The choke manifold equipment, upper Kelly cock, floor safety valves will be tested to 5000 psi. The annular preventer will be tested to 250 psi low and 2500 psi high or 50% of rated working pressure. The BOPE will be hydraulically operated.

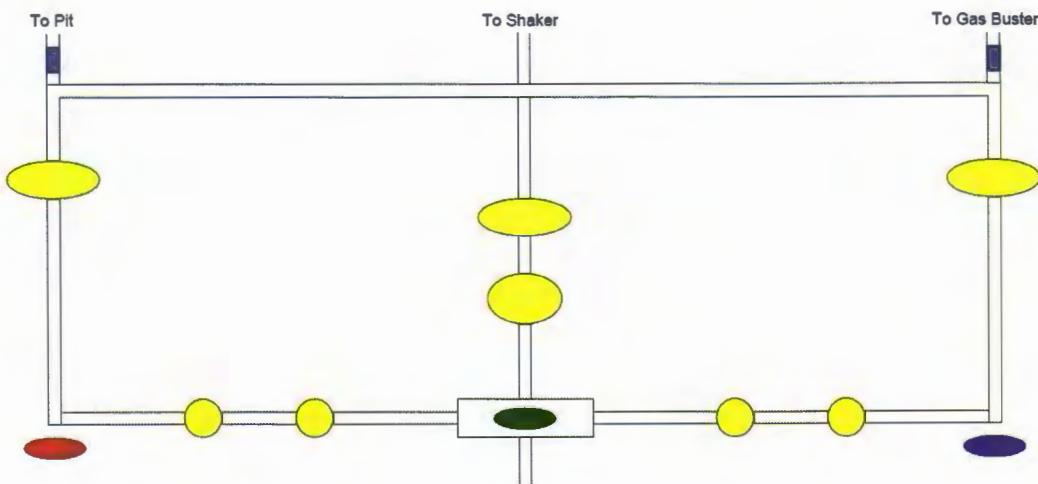
At minimum, the BOP equipment will be pressure tested after initial installation, after running intermediate casing, after any repairs to the equipment and at least once every 30 days.

Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew. All BOP drills and tests will be recorded in the IADC driller's log.

Choke Manifold Equipment:

All choke lines will be straight lines. Whenever possible at turns, tee blocks will be used or will be targeted with running tees, and will be anchored to prevent whip and vibration.

Choke Manifold Diagram



Red is 5000# manual choke

Purple is 5000# remote controlled choke

Yellow are 5000# gate valves

Blue are ball valves

Green is a pressure gauge

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

Accumulator System and Location of Hydraulic Controls:

The accumulator will have sufficient capacity to open the hydraulically controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above pre-charge on the closing manifold without the use of the closing unit pumps. The fluid reservoir capacity will be double the accumulator capacity and the fluid level will be maintained at the manufacturer's recommendations. The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator pre-charge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured pre-charge pressure is found to be above or below the maximum or minimum limits specified in *Onshore Oil & Gas Order Number 2*.

Auxiliary Equipment:

- A) Mud logger with gas monitor –**8,284'** (200' above Charles Salt to Intermediate TD)
- B) Choke manifold with one manual and one hydraulic operated choke
- C) Full opening floor valve with drill pipe thread
- D) Upper and lower Kelly cock
- E) Shale shakers and possible mud cleaner.

Miscellaneous Information:

Nabors 486 is being considered to be used at the proposed location. Operations will commence after approval of this application.

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*.

The choke manifold and BOP extension rods with hand wheels will be located outside the rig substructure. The hydraulic BOP closing unit will be located at least twenty five (25) feet from the wellhead but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this well.

A flare line will be installed after the choke manifold, connecting the manifold to a separate flare tank located at least 125 feet away from the wellbore and any existing production facilities.

Anticipated bottom hole temperature is 265° F.

4. Proposed Casing & Cementing Program:

a. Planned Program

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

SURFACE CASING AND CEMENT DESIGN

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
13-3/8"	0' to 2,100'	54.5	J-55	STC	12.615"	12.459"	4,100	5,470	6,840

Interval	Description	Collapse	Burst	Tension
		(psi) a	(psi) b	(1000 lbs) c
0' to 2,100'	13-3/8", 54.5#, J-55, STC, 8rd	1130 / 1.15	2730 / 2.78	514 / 2.58

API Rating & Safety Factor

- a) Based on full casing evacuation with 9 ppg fluid on backside (2,100' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2,100' setting depth).
- c) Based on string weight in 9 ppg fluid at 2,100' TVD plus 100k# overpull. (Buoyed weight equals 99k lbs.)

Cement volumes are based on 13-3/8" casing set in 17-1/2" 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: **620 sks** (328 bbls) 2.97 yield conventional system with 94 lb/sk cement, .25 lb/sk D130 Lost Circulation Control Agent, 2% CaCl₂, 4% D079 Extender and 2% D053 Expanding Agent.

Tail Slurry: **201 sks** (72 bbls) 2.01 yield conventional system with 94 lb/sk cement, .25 lb/sk D130 Lost Circulation Control Agent, 2% CaCl₂, 4% D079 Extender and 2% D053 Expanding Agent.

OASIS PETROLEUM NORTH AMERICA LLC

Drilling Program

Wade Federal 5300 31-30 2B

Section 30 T153N R100W

McKenzie County, ND

CONTINGENCY 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 6,400'	40	L-80	LTC	8.835"	8.75"	5,450	7,270	9,090

Interval	Description	Collapse	Burst	Tension
		(psi) a	(psi) b	(1000 lbs) c
0' to 6,400'	9-5/8", 40#, L-80, LTC, 8rd	3090 / 3.71	5750 / 1.24	837 / 3.86

API Rating & Safety Factor

- a) Collapse pressure based on 11.5 ppg fluid on the backside and 9 ppg fluid inside of casing.
- b) Burst pressure calculated from a gas kick coming from the production zone (Bakken Pool) at 9,000 psi and a subsequent breakdown at the 9-5/8" shoe, based on a 13.5#/ft fracture gradient. Backup of 9 ppg fluid.
- c) Yield based on string weight in 10 ppg fluid, (217k lbs buoied weight) plus 100k lbs overpull.

Cement volumes are based on 9-5/8" casing set in 12-1/4" hole with 10% excess in OH and 0% excess inside surface casing. TOC at surface.

Pre-flush (Spacer): **20 bbls** Chem wash

Lead Slurry: **592 sks** (210 bbls) Conventional system with 75 lb/sk cement, 0.5 lb/sk lost circulation, 10% expanding agent, 2% extender, 2% CaCl₂, 0.2% anti-foam and 0.4% fluid loss agent.

Tail Slurry: **521 sks** (108 bbls) Conventional system with 94 lb/sk cement, 0.3% anti-settling agent, 0.3% fluid loss agent, 0.3 lb/sk lost circulation control agent, 0.2% anti-foam and 0.1% retarder.

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
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' – 10,994'	32	HCP-110	LTC	6.094"	6.000"	6730	8970	9870

***Special drift

Interval	Length	Description	Collapse	Burst	Tension
			(psi) a	(psi) b	(1000 lbs) c
0' - 10994'	10994'	7", 32#, P-110, LTC, 8rd	11820 / 2.12*	12460 / 1.28	897 / 2.25
6746' - 9163'	2417'	7", 32#, HCP-110, LTC, 8rd	11820 / 1.28**	12460 / 1.30	

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 9000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9 ppg fluid on backside-to 10,701' TVD.
- c) Based on string weight in 10 ppg fluid, (298k lbs buoyed weight) plus 100k

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 Weighted MudPush Express

Lead Slurry: **222 sks** (87 bbls) 2.21 yield conventional system with 47 lb/sk cement, 37 lb/sk D035 extender, 3.0% KCl, 3.0% D154 extender, 0.3% D208 viscosifier, 0.07% retarder, 0.2% anti-foam, 0.5 lb/sk, D130 LCM.

Tail Slurry: **599 sks** (164 bbls) 1.54 yield conventional system with 94 lb/sk cement, 3.0% KCl, 35.0% Silica, 0.5% retarder, 0.2% fluid loss, 0.2% anti-foam and 0.5 lb/sk LCM.

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

PRODUCTION LINER

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10174' - 20693'	13.5	P-110	BTC	3.920"	3.795"	2270	3020	3780

Interval	Length	Description	Collapse	Burst	Tension
			(psi) a	(psi) b	(1000 lbs) c
10174' - 20693'	10519	4-1/2", 13.5 lb, P-110, BTC	10670 / 2.00	12410 / 1.28	443 / 2.0

API Rating & Safety Factor

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10,761' TVD.
Burst pressure based on 9000 psi treating pressure with 10.2 ppg internal fluid gradient and 9 ppg external
- b) fluid gradient @ 10,761' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 121k lbs.) plus 100k lbs overpull.

The liner will be placed un-cemented at total depth.

All casing strings will meet or exceed the following design safety factors:

- Collapse = 1.125
- Burst = 1.00
- Tension = 1.2 (including 100k overpull)

Casing Float Equipment:

- PDC drillable float shoe, thread locked
- Shoe track
 - 1 joint casing for surface casing
 - 2 joints casing for intermediate string
- PDC drillable float collar, thread locked.

Casing strings will be pressure tested to the greater of 0.22 psi/ft of casing string length or 1,500 psi (not to exceed 70% of the internal yield strength of the casing) after cementing and prior to drilling out from under the casing shoe.

Cement Designs:

Cement design calculations will be based on 60% (Surface) and 30% (Intermediate) excess over gauge hole volumes. Actual volumes pumped will be a minimum of 20% excess over caliper volume to designed tops of cement for any section logged.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

5. Drilling Fluids Program:

Proposed Mud Program:

Interval	Type	Mud Weight	Fluid Loss
0' – 2,100'	FW/Gel	8.4 – 9.0	NC
2,100' – 10,994'	Invert Oil Based Mud	9.5 - 10.5	<20-10 cc's (vertical); <10 cc's (curve)
10,994' – 20,693'	Saltwater Brine	9.3 - 10.2	NC

Anticipated mud weights are based on actual offset well bottom hole pressure data plus trip margins. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Sufficient mud materials to maintain mud properties, control lost circulation and maintain well control will be stored at the well site during the entire drilling operation.

Visual mud monitoring equipment will be utilized.

6. Evaluation Program:

Logs: GR/Res to base of surface casing; GR to surface; CND through Dakota
 DSTs: None currently planned.
 Cores: None currently planned.
 Mudlogger: Samples with gas monitor –8,482' (200' above Charles Salt to Intermediate TD)
 10' or 30' samples at the direction of the wellsite geologist.

The proposed Evaluation Program may change at the discretion of the Geologist, with prior approval from the Authorized Officer, Bureau of Land Management.

A Casing Bond Log on the Intermediate Casing will be run by the completion team after drilling moves off location.

Stimulation: A stimulation or frac treatment may be designed for completion of this well based on open hole log results. The drill site, as approved, will be of sufficient size to accommodate all completion activities.

Whether the well is a dry hole or completed as a producer, the Well Completion and Recompletion Report and Log (Form #3160-4) will be submitted no later than thirty (30) days after the completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164.

Two (2) copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations will be filed on Form #3160-4. Samples (cuttings, fluids and/or gases) will be submitted when requested by the local Area Manager of BLM.

7. Abnormal Conditions:

No abnormal temperatures or pressures are anticipated.

OASIS PETROLEUM NORTH AMERICA LLC
Drilling Program
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

No H₂S has been encountered in or is known to exist from previous wells drilled to similar depths in the general area. However, H₂S is known to exist in the Mission Canyon in the Williston Basin. Preparations will be made to execute H₂S contingency plan if needed.

Maximum anticipated bottom hole pressure calculated at **10,761'** TVD (base of projected target zone accounting for estimated formation dip rate throughout lateral) equals approximately **5,100** psi (calculated at 0.434 psi/ft).

Maximum anticipated surface pressure equals approximately **2,510** psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

8. Anticipated Starting Date and Notification of Operations

A. Anticipated Starting Date and Duration of Operations:

Anticipated Commencement Date:	Fall, 2014
Drilling Days:	Approximately 30 days
Completions Days:	Approximately 20 days

B. Notification of Operations:

Bureau of Land Management North Dakota Field Office 99 23 rd Avenue West Dickinson, ND 58601 Phone: 701-227-7700	North Dakota Industrial Commission Oil and Gas Division 600 East Boulevard Ave Dept 405 Bismarck, ND 58505-0840 Phone: 701-328-8020
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The spud date will be orally reported to the Authorized Officer Twenty Four (24) hours prior to spud, unless otherwise required in the site specific conditions of approval.

All wells, whether drilling, producing, suspended or abandoned shall be identified in accordance with 43 CFR 3162.6. This requires the name of the Operator, the lease number, the well number and the location of the well.

In accordance with *Onshore Oil & Gas Order Number 1*, this well will be reported on MMS Form #3160-6, *Monthly Report of Operations and Production*, starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with the Royalty Management Program, Minerals Management Service.

All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL-3A will be reported to the BLM Field Office. Major events will be reported verbally within twenty-four (24) hours and will be followed with a written report within fifteen (15) days. All other events will be reported in writing within fifteen (15) days. Minor events will be reported on the *Monthly Report of Operations and Production* (Form #3160-6).

No well abandonment operations will be commenced without prior approval of the Area Petroleum Engineer. A *Notice of Intention to Abandon* (Form #3160-5) will be filed with the Authorized Officer within five (5) days following the granting of oral approval to plug and abandon. Upon completion of approved plugging, a regulation marker will be erected in accordance with 49 CFR 3162.6. The following information will be permanently placed on the marker with a plate, cap, or beaded-on with a

OASIS PETROLEUM NORTH AMERICA LLC

Drilling Program

Wade Federal 5300 31-30 2B

Section 30 T153N R100W

McKenzie County, ND

welding torch: Company Name, Well Name and Number, Location by Quarter/Quarter, Section, Township, Range, and the Federal Lease Number.

A subsequent *Report of Abandonment* (Form #3160-5) will be submitted within thirty (30) days following the actual plugging of the well bore. This report will indicate where plugs are placed and the

current status of surface restoration operations. If surface restoration has not been completed at that time, a follow-up report on Form #3160-5 will be filed when all surface restoration work has been completed and the location is ready for final inspection.

Pursuant to NTL-4A, lessees and operators are authorized to vent / flare gas during initial well evaluation tests, not exceeding a period of thirty (30) days or the production of fifty (50) MMCF of gas, whichever occurs first. An Application must be filed with the Authorized Officer, and approval received for any venting / flaring of gas beyond the initial thirty (30) day or otherwise authorized test period.

Not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than ninety (90) days, the Operator shall notify the Authorized Officer by letter or Sundry Notice of the date on which such production has begun or resumed. The notification shall provide as a minimum the following informational items;

- a. Operator's name, address and telephone number.
- b. Well name and number.
- c. Well location (qtr/qtr, section, township, range, P.M.)
- d. Date well was placed in a producing status.
- e. The nature of the wells' production (i.e. crude oil, casing gas or natural gas and entrained liquid hydrocarbons).
- f. The OCS, Federal prefix and number on which the well is located.

Within sixty (60) days following construction of a new tank battery, a site facility diagram of the battery showing actual conditions and piping must be submitted to the Authorized Officer. Facility diagrams shall be filed within sixty (60) days after existing facilities are modified.

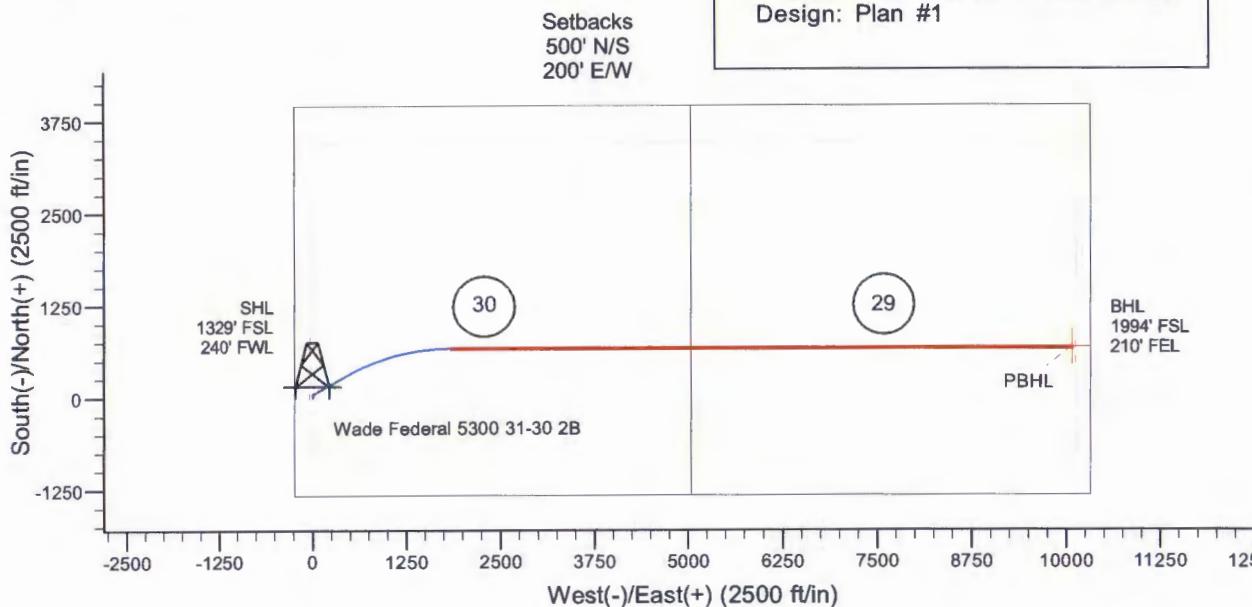
Pursuant to *Onshore Oil & Gas Order Number 1*, lessees and operators have the responsibility to see that their exploration, development, production and construction operations are conducted in such a manner which conforms with applicable federal laws and regulations, and with state and local laws and regulations to the extent that such state and local laws are applicable to operations on Federal and Indian lands.

Mike Brown 3/31/2014
Drilling Engineer

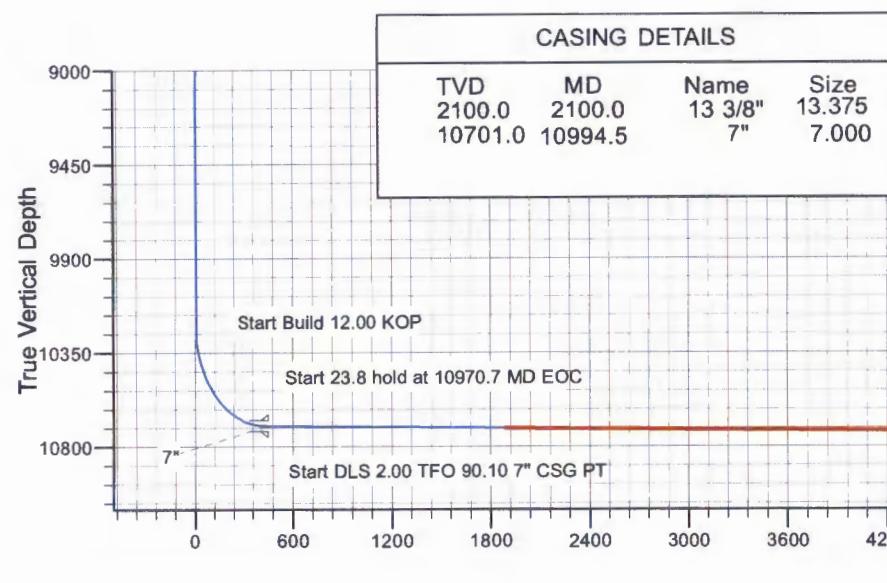
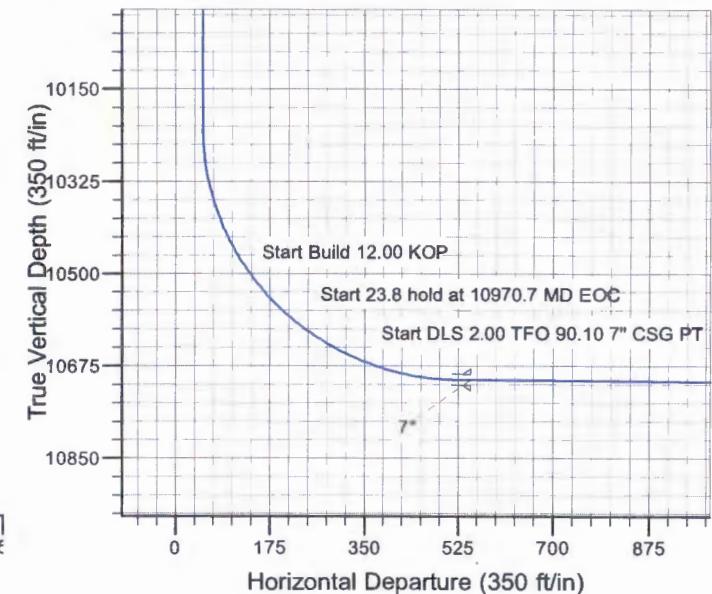

 Azimuths to True North
 Magnetic North: 8.18°
 Magnetic Field Strength: 56489.0 nT
 Dip Angle: 72.95°
 Date: 1/28/2014
 Model: IGRF200510



Project: Indian Hills
 Site: 153N-100W-29/30
 Well: Wade Federal 5300 31-30 2B
 Wellbore: Wade Federal 5300 31-30 2B
 Design: Plan #1



SITE DETAILS: 153N-100W-29/30	
Site Centre Latitude:	48° 2' 32.580 N
Longitude:	103° 36' 11.410 W
Positional Uncertainty:	0.0
Convergence:	-2.31
Local North:	True



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	
2100.0	0.00	0.00	2100.0	0.0	0.0	0.00	
2110.0	0.50	0.00	2110.0	0.0	0.0	5.00	
7829.7	0.50	0.00	7829.4	50.0	0.0	0.00	
7839.7	0.00	0.00	7839.4	50.0	0.0	5.00	
10000.2	0.00	0.00	10000.0	50.0	0.0	0.00	
10223.6	0.00	0.00	10223.4	50.0	0.0	0.00	
10970.7	89.65	60.55	10700.9	283.3	413.2	12.00	
10994.5	89.65	60.55	10701.0	295.0	434.0	0.00	
12466.8	89.65	90.00	10710.2	665.0	1842.3	2.00	
20693.9	89.65	90.00	10761.1	665.0	10069.2	0.00	PBHL

Oasis

**Indian Hills
153N-100W-29/30
Wade Federal 5300 31-30 2B**

Wade Federal 5300 31-30 2B

Plan: Plan #1

Standard Planning Report

28 July, 2014

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	Plan #1		

Project	Indian Hills	
Map System:	US State Plane 1983	
Geo Datum:	North American Datum 1983	
Map Zone:	North Dakota Northern Zone	

Site	153N-100W-29/30
Site Position:	Northing: 395,521.43 ft
From: Lat/Long	Easting: 1,209,621.64 ft
Position Uncertainty: 0.0 ft	Slot Radius: 13.200 in

Latitude: 48° 2' 32.580 N
Longitude: 103° 36' 11.410 W
Grid Convergence: -2.31 °

Well	Wade Federal 5300 31-30 2B
Well Position	+N-S 20.3 ft Northing: 395,541.68 ft Latitude: 48° 2' 32.780 N
	+E-W 0.0 ft Easting: 1,209,622.46 ft Longitude: 103° 36' 11.410 W
Position Uncertainty	0.0 ft Wellhead Elevation: Ground Level: 2,045.0 ft

Wellbore	Wade Federal 5300 31-30 2B
Magnetics	Model Name IGRF200510 Sample Date 1/28/2014 Declination (°) 8.18 Dip Angle (°) 72.95 Field Strength (nT) 56,489

Design	Plan #1
Audit Notes:	
Version:	
Vertical Section:	
Depth From (TVD) (ft)	
0.0	
+N-S (ft)	
0.0	
+E-W (ft)	
0.0	
Direction (°)	
86.22	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,110.0	0.50	0.00	2,110.0	0.0	0.0	5.00	5.00	0.00	0.00	0.00
7,829.7	0.50	0.00	7,829.4	50.0	0.0	0.00	0.00	0.00	0.00	0.00
7,839.7	0.00	0.00	7,839.4	50.0	0.0	5.00	-5.00	0.00	0.00	180.00
10,000.2	0.00	0.00	10,000.0	50.0	0.0	0.00	0.00	0.00	0.00	0.00
10,223.6	0.00	0.00	10,223.4	50.0	0.0	0.00	0.00	0.00	0.00	0.00
10,970.7	89.65	60.55	10,700.9	283.3	413.2	12.00	12.00	0.00	0.00	60.55
10,994.5	89.65	60.55	10,701.0	295.0	434.0	0.00	0.00	0.00	0.00	0.00
12,466.8	89.65	90.00	10,710.2	665.0	1,842.3	2.00	0.00	2.00	0.00	90.10
20,693.9	89.65	90.00	10,761.1	665.0	10,069.2	0.00	0.00	0.00	0.00	PBHL

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	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	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	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	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	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	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	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	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	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	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	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	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	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	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	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	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	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	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,920.0	0.00	0.00	1,920.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
Pierre										
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	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	0.00
Start Build 5.00 - 9 5/8"										
2,110.0	0.50	0.00	2,110.0	0.0	0.0	0.0	5.00	5.00	0.00	0.00
Start 5719.7 hold at 2110.0 MD										
2,200.0	0.50	0.00	2,200.0	0.8	0.0	0.1	0.00	0.00	0.00	0.00
2,300.0	0.50	0.00	2,300.0	1.7	0.0	0.1	0.00	0.00	0.00	0.00
2,400.0	0.50	0.00	2,400.0	2.6	0.0	0.2	0.00	0.00	0.00	0.00
2,500.0	0.50	0.00	2,500.0	3.4	0.0	0.2	0.00	0.00	0.00	0.00
2,600.0	0.50	0.00	2,600.0	4.3	0.0	0.3	0.00	0.00	0.00	0.00
2,700.0	0.50	0.00	2,700.0	5.2	0.0	0.3	0.00	0.00	0.00	0.00
2,800.0	0.50	0.00	2,800.0	6.1	0.0	0.4	0.00	0.00	0.00	0.00
2,900.0	0.50	0.00	2,900.0	6.9	0.0	0.5	0.00	0.00	0.00	0.00
3,000.0	0.50	0.00	3,000.0	7.8	0.0	0.5	0.00	0.00	0.00	0.00
3,100.0	0.50	0.00	3,100.0	8.7	0.0	0.6	0.00	0.00	0.00	0.00
3,200.0	0.50	0.00	3,200.0	9.6	0.0	0.6	0.00	0.00	0.00	0.00
3,300.0	0.50	0.00	3,300.0	10.4	0.0	0.7	0.00	0.00	0.00	0.00
3,400.0	0.50	0.00	3,400.0	11.3	0.0	0.7	0.00	0.00	0.00	0.00
3,500.0	0.50	0.00	3,499.9	12.2	0.0	0.8	0.00	0.00	0.00	0.00
3,600.0	0.50	0.00	3,599.9	13.0	0.0	0.9	0.00	0.00	0.00	0.00
3,700.0	0.50	0.00	3,699.9	13.9	0.0	0.9	0.00	0.00	0.00	0.00
3,800.0	0.50	0.00	3,799.9	14.8	0.0	1.0	0.00	0.00	0.00	0.00
3,900.0	0.50	0.00	3,899.9	15.7	0.0	1.0	0.00	0.00	0.00	0.00
4,000.0	0.50	0.00	3,999.9	16.5	0.0	1.1	0.00	0.00	0.00	0.00
4,100.0	0.50	0.00	4,099.9	17.4	0.0	1.1	0.00	0.00	0.00	0.00
4,200.0	0.50	0.00	4,199.9	18.3	0.0	1.2	0.00	0.00	0.00	0.00
4,300.0	0.50	0.00	4,299.9	19.2	0.0	1.3	0.00	0.00	0.00	0.00
4,400.0	0.50	0.00	4,399.9	20.0	0.0	1.3	0.00	0.00	0.00	0.00
4,500.0	0.50	0.00	4,499.9	20.9	0.0	1.4	0.00	0.00	0.00	0.00
4,566.1	0.50	0.00	4,566.0	21.5	0.0	1.4	0.00	0.00	0.00	0.00
Greenhorn										
4,600.0	0.50	0.00	4,599.9	21.8	0.0	1.4	0.00	0.00	0.00	0.00
4,700.0	0.50	0.00	4,699.9	22.6	0.0	1.5	0.00	0.00	0.00	0.00

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)	
4,800.0	0.50	0.00	4,799.9	23.5	0.0	1.5	0.00	0.00	0.00	
4,900.0	0.50	0.00	4,899.9	24.4	0.0	1.6	0.00	0.00	0.00	
4,969.1	0.50	0.00	4,969.0	25.0	0.0	1.6	0.00	0.00	0.00	
Mowry										
5,000.0	0.50	0.00	4,999.9	25.3	0.0	1.7	0.00	0.00	0.00	
5,100.0	0.50	0.00	5,099.9	26.1	0.0	1.7	0.00	0.00	0.00	
5,200.0	0.50	0.00	5,199.9	27.0	0.0	1.8	0.00	0.00	0.00	
5,300.0	0.50	0.00	5,299.9	27.9	0.0	1.8	0.00	0.00	0.00	
5,391.1	0.50	0.00	5,391.0	28.7	0.0	1.9	0.00	0.00	0.00	
Dakota										
5,400.0	0.50	0.00	5,399.9	28.8	0.0	1.9	0.00	0.00	0.00	
5,500.0	0.50	0.00	5,499.9	29.6	0.0	2.0	0.00	0.00	0.00	
5,600.0	0.50	0.00	5,599.9	30.5	0.0	2.0	0.00	0.00	0.00	
5,700.0	0.50	0.00	5,699.9	31.4	0.0	2.1	0.00	0.00	0.00	
5,800.0	0.50	0.00	5,799.9	32.2	0.0	2.1	0.00	0.00	0.00	
5,900.0	0.50	0.00	5,899.9	33.1	0.0	2.2	0.00	0.00	0.00	
6,000.0	0.50	0.00	5,999.9	34.0	0.0	2.2	0.00	0.00	0.00	
6,100.0	0.50	0.00	6,099.8	34.9	0.0	2.3	0.00	0.00	0.00	
6,200.0	0.50	0.00	6,199.8	35.7	0.0	2.4	0.00	0.00	0.00	
6,300.0	0.50	0.00	6,299.8	36.6	0.0	2.4	0.00	0.00	0.00	
6,400.0	0.50	0.00	6,399.8	37.5	0.0	2.5	0.00	0.00	0.00	
6,407.2	0.50	0.00	6,407.0	37.5	0.0	2.5	0.00	0.00	0.00	
Rierdon										
6,500.0	0.50	0.00	6,499.8	38.4	0.0	2.5	0.00	0.00	0.00	
6,600.0	0.50	0.00	6,599.8	39.2	0.0	2.6	0.00	0.00	0.00	
6,700.0	0.50	0.00	6,699.8	40.1	0.0	2.6	0.00	0.00	0.00	
6,800.0	0.50	0.00	6,799.8	41.0	0.0	2.7	0.00	0.00	0.00	
6,896.2	0.50	0.00	6,896.0	41.8	0.0	2.8	0.00	0.00	0.00	
Dunham Salt										
6,900.0	0.50	0.00	6,899.8	41.8	0.0	2.8	0.00	0.00	0.00	
6,942.2	0.50	0.00	6,942.0	42.2	0.0	2.8	0.00	0.00	0.00	
Dunham Salt Base										
7,000.0	0.50	0.00	6,999.8	42.7	0.0	2.8	0.00	0.00	0.00	
7,100.0	0.50	0.00	7,099.8	43.6	0.0	2.9	0.00	0.00	0.00	
7,200.0	0.50	0.00	7,199.8	44.5	0.0	2.9	0.00	0.00	0.00	
7,205.2	0.50	0.00	7,205.0	44.5	0.0	2.9	0.00	0.00	0.00	
Pine Salt										
7,229.2	0.50	0.00	7,229.0	44.7	0.0	2.9	0.00	0.00	0.00	
Pine Salt Base										
7,291.2	0.50	0.00	7,291.0	45.3	0.0	3.0	0.00	0.00	0.00	
Opeche Salt										
7,300.0	0.50	0.00	7,299.8	45.3	0.0	3.0	0.00	0.00	0.00	
7,371.2	0.50	0.00	7,371.0	46.0	0.0	3.0	0.00	0.00	0.00	
Opeche Salt Base										
7,400.0	0.50	0.00	7,399.8	46.2	0.0	3.0	0.00	0.00	0.00	
7,500.0	0.50	0.00	7,499.8	47.1	0.0	3.1	0.00	0.00	0.00	
7,600.0	0.50	0.00	7,599.8	48.0	0.0	3.2	0.00	0.00	0.00	
7,615.2	0.50	0.00	7,615.0	48.1	0.0	3.2	0.00	0.00	0.00	
Amsden										
7,700.0	0.50	0.00	7,699.8	48.8	0.0	3.2	0.00	0.00	0.00	
7,771.2	0.50	0.00	7,771.0	49.4	0.0	3.3	0.00	0.00	0.00	
Tyler										
7,800.0	0.50	0.00	7,799.8	49.7	0.0	3.3	0.00	0.00	0.00	
7,829.7	0.50	0.00	7,829.4	50.0	0.0	3.3	0.00	0.00	0.00	

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)	
Start Drop -5.00										
7,839.7	0.00	0.00	7,839.4	50.0	0.0	3.3	5.00	-5.00	0.00	
Start 2160.6 hold at 7839.7 MD										
7,900.0	0.00	0.00	7,899.8	50.0	0.0	3.3	0.00	0.00	0.00	
7,994.2	0.00	0.00	7,994.0	50.0	0.0	3.3	0.00	0.00	0.00	
Otter/Base Minnelusa										
8,000.0	0.00	0.00	7,999.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,099.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,199.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,299.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,336.2	0.00	0.00	8,336.0	50.0	0.0	3.3	0.00	0.00	0.00	
Kibbey Lime										
8,400.0	0.00	0.00	8,399.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,484.2	0.00	0.00	8,484.0	50.0	0.0	3.3	0.00	0.00	0.00	
Charles Salt										
8,500.0	0.00	0.00	8,499.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,599.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,699.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,799.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,899.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,999.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,099.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,163.2	0.00	0.00	9,163.0	50.0	0.0	3.3	0.00	0.00	0.00	
Base Last Salt										
9,200.0	0.00	0.00	9,199.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,299.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,377.2	0.00	0.00	9,377.0	50.0	0.0	3.3	0.00	0.00	0.00	
Mission Canyon										
9,400.0	0.00	0.00	9,399.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,499.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,599.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,699.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,799.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,899.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,926.2	0.00	0.00	9,926.0	50.0	0.0	3.3	0.00	0.00	0.00	
Lodgepole										
10,000.2	0.00	0.00	10,000.0	50.0	0.0	3.3	0.00	0.00	0.00	
Start 223.4 hold at 10000.2 MD										
10,100.0	0.00	0.00	10,099.8	50.0	0.0	3.3	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,199.8	50.0	0.0	3.3	0.00	0.00	0.00	
10,223.6	0.00	0.00	10,223.4	50.0	0.0	3.3	0.00	0.00	0.00	
Start Build 12.00 KOP										
10,225.0	0.17	60.55	10,224.8	50.0	0.0	3.3	12.00	12.00	0.00	
10,250.0	3.17	60.55	10,249.8	50.4	0.6	4.0	12.00	12.00	0.00	
10,275.0	6.17	60.55	10,274.7	51.4	2.4	5.8	12.00	12.00	0.00	
10,300.0	9.17	60.55	10,299.5	53.0	5.3	8.8	12.00	12.00	0.00	
10,325.0	12.17	60.55	10,324.0	55.3	9.3	13.0	12.00	12.00	0.00	
10,350.0	15.17	60.55	10,348.3	58.2	14.5	18.3	12.00	12.00	0.00	
10,375.0	18.17	60.55	10,372.3	61.7	20.7	24.7	12.00	12.00	0.00	
10,400.0	21.17	60.55	10,395.8	65.8	28.0	32.3	12.00	12.00	0.00	
10,425.0	24.17	60.55	10,418.9	70.6	36.4	41.0	12.00	12.00	0.00	
10,450.0	27.17	60.55	10,441.4	75.9	45.9	50.8	12.00	12.00	0.00	
10,475.0	30.17	60.55	10,463.3	81.8	56.3	61.6	12.00	12.00	0.00	
10,500.0	33.17	60.55	10,484.6	88.2	67.7	73.4	12.00	12.00	0.00	

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)
10,525.0	36.17	60.55	10,505.2	95.2	80.1	86.2	12.00	12.00	0.00
10,550.0	39.17	60.55	10,525.0	102.7	93.4	100.0	12.00	12.00	0.00
10,575.0	42.17	60.55	10,543.9	110.7	107.6	114.7	12.00	12.00	0.00
10,600.0	45.17	60.55	10,562.0	119.2	122.6	130.2	12.00	12.00	0.00
10,625.0	48.17	60.55	10,579.1	128.2	138.5	146.6	12.00	12.00	0.00
10,650.0	51.17	60.55	10,595.3	137.5	155.1	163.8	12.00	12.00	0.00
10,675.0	54.17	60.55	10,610.5	147.3	172.4	181.7	12.00	12.00	0.00
10,700.0	57.17	60.55	10,624.6	157.5	190.3	200.3	12.00	12.00	0.00
10,725.0	60.17	60.55	10,637.6	167.9	208.9	219.6	12.00	12.00	0.00
10,750.0	63.17	60.55	10,649.4	178.8	228.1	239.4	12.00	12.00	0.00
10,765.0	64.96	60.55	10,656.0	185.4	239.8	251.5	12.00	12.00	0.00
False Bakken									
10,775.0	66.17	60.55	10,660.1	189.9	247.8	259.7	12.00	12.00	0.00
10,795.4	68.62	60.55	10,668.0	199.1	264.2	276.7	12.00	12.00	0.00
Upper Bakken Shale									
10,800.0	69.17	60.55	10,669.6	201.2	267.9	280.6	12.00	12.00	0.00
10,825.0	72.17	60.55	10,677.9	212.8	288.4	301.8	12.00	12.00	0.00
10,850.0	75.17	60.55	10,685.0	224.6	309.3	323.5	12.00	12.00	0.00
10,875.0	78.17	60.55	10,690.7	236.6	330.5	345.4	12.00	12.00	0.00
10,898.7	81.01	60.55	10,695.0	248.0	350.8	366.4	12.00	12.00	0.00
Middle Bakken (Top of Target)									
10,900.0	81.17	60.55	10,695.2	248.7	351.9	367.6	12.00	12.00	0.00
10,925.0	84.17	60.55	10,698.4	260.9	373.5	389.9	12.00	12.00	0.00
10,950.0	87.17	60.55	10,700.3	273.1	395.2	412.4	12.00	12.00	0.00
10,970.7	89.65	60.55	10,700.9	283.3	413.2	431.0	12.00	12.00	0.00
Start 23.8 hold at 10970.7 MD EOC									
10,994.5	89.65	60.55	10,701.0	295.0	434.0	452.5	0.00	0.00	0.00
Start DLS 2.00 TFO 90.10 - 7"									
11,000.0	89.65	60.66	10,701.0	297.7	438.8	457.4	1.99	0.00	1.99
11,100.0	89.65	62.66	10,701.6	345.1	526.8	548.4	2.00	0.00	2.00
11,200.0	89.64	64.66	10,702.3	389.5	616.4	640.7	2.00	0.00	2.00
11,300.0	89.64	66.66	10,702.9	430.7	707.5	734.3	2.00	0.00	2.00
11,400.0	89.64	68.66	10,703.5	468.7	800.0	829.1	2.00	0.00	2.00
11,500.0	89.64	70.66	10,704.1	503.5	893.8	925.0	2.00	0.00	2.00
11,600.0	89.64	72.66	10,704.8	534.9	988.7	1,021.8	2.00	0.00	2.00
11,700.0	89.64	74.66	10,705.4	563.0	1,084.6	1,119.4	2.00	0.00	2.00
11,800.0	89.64	76.66	10,706.1	587.8	1,181.5	1,217.7	2.00	0.00	2.00
11,900.0	89.64	78.66	10,706.7	609.2	1,279.2	1,316.6	2.00	0.00	2.00
12,000.0	89.64	80.66	10,707.3	627.1	1,377.6	1,415.9	2.00	0.00	2.00
12,100.0	89.64	82.66	10,708.0	641.6	1,476.5	1,515.6	2.00	0.00	2.00
12,200.0	89.64	84.66	10,708.6	652.6	1,575.9	1,615.5	2.00	0.00	2.00
12,300.0	89.64	86.66	10,709.2	660.2	1,675.6	1,715.4	2.00	0.00	2.00
12,400.0	89.64	88.66	10,709.8	664.3	1,775.5	1,815.4	2.00	0.00	2.00
12,466.8	89.65	90.00	10,710.2	665.0	1,842.3	1,882.1	2.00	0.00	2.00
Start 8227.1 hold at 12466.8 MD									
12,500.0	89.65	90.00	10,710.5	665.0	1,875.5	1,915.2	0.00	0.00	0.00
12,600.0	89.65	90.00	10,711.1	665.0	1,975.5	2,015.0	0.00	0.00	0.00
12,700.0	89.65	90.00	10,711.7	665.0	2,075.5	2,114.8	0.00	0.00	0.00
12,800.0	89.65	90.00	10,712.3	665.0	2,175.5	2,214.6	0.00	0.00	0.00
12,900.0	89.65	90.00	10,712.9	665.0	2,275.5	2,314.4	0.00	0.00	0.00
13,000.0	89.65	90.00	10,713.5	665.0	2,375.5	2,414.1	0.00	0.00	0.00
13,100.0	89.65	90.00	10,714.2	665.0	2,475.5	2,513.9	0.00	0.00	0.00
13,200.0	89.65	90.00	10,714.8	665.0	2,575.5	2,613.7	0.00	0.00	0.00
13,300.0	89.65	90.00	10,715.4	665.0	2,675.5	2,713.5	0.00	0.00	0.00

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)	
13,400.0	89.65	90.00	10,716.0	665.0	2,775.5	2,813.3	0.00	0.00	0.00	
13,500.0	89.65	90.00	10,716.6	665.0	2,875.5	2,913.0	0.00	0.00	0.00	
13,600.0	89.65	90.00	10,717.2	665.0	2,975.5	3,012.8	0.00	0.00	0.00	
13,700.0	89.65	90.00	10,717.9	665.0	3,075.5	3,112.6	0.00	0.00	0.00	
13,800.0	89.65	90.00	10,718.5	665.0	3,175.5	3,212.4	0.00	0.00	0.00	
13,900.0	89.65	90.00	10,719.1	665.0	3,275.5	3,312.2	0.00	0.00	0.00	
14,000.0	89.65	90.00	10,719.7	665.0	3,375.5	3,411.9	0.00	0.00	0.00	
14,100.0	89.65	90.00	10,720.3	665.0	3,475.5	3,511.7	0.00	0.00	0.00	
14,200.0	89.65	90.00	10,721.0	665.0	3,575.5	3,611.5	0.00	0.00	0.00	
14,300.0	89.65	90.00	10,721.6	665.0	3,675.5	3,711.3	0.00	0.00	0.00	
14,400.0	89.65	90.00	10,722.2	665.0	3,775.4	3,811.1	0.00	0.00	0.00	
14,500.0	89.65	90.00	10,722.8	665.0	3,875.4	3,910.9	0.00	0.00	0.00	
14,600.0	89.65	90.00	10,723.4	665.0	3,975.4	4,010.6	0.00	0.00	0.00	
14,700.0	89.65	90.00	10,724.0	665.0	4,075.4	4,110.4	0.00	0.00	0.00	
14,800.0	89.65	90.00	10,724.7	665.0	4,175.4	4,210.2	0.00	0.00	0.00	
14,900.0	89.65	90.00	10,725.3	665.0	4,275.4	4,310.0	0.00	0.00	0.00	
15,000.0	89.65	90.00	10,725.9	665.0	4,375.4	4,409.8	0.00	0.00	0.00	
15,100.0	89.65	90.00	10,726.5	665.0	4,475.4	4,509.5	0.00	0.00	0.00	
15,200.0	89.65	90.00	10,727.1	665.0	4,575.4	4,609.3	0.00	0.00	0.00	
15,300.0	89.65	90.00	10,727.8	665.0	4,675.4	4,709.1	0.00	0.00	0.00	
15,400.0	89.65	90.00	10,728.4	665.0	4,775.4	4,808.9	0.00	0.00	0.00	
15,500.0	89.65	90.00	10,729.0	665.0	4,875.4	4,908.7	0.00	0.00	0.00	
15,600.0	89.65	90.00	10,729.6	665.0	4,975.4	5,008.4	0.00	0.00	0.00	
15,700.0	89.65	90.00	10,730.2	665.0	5,075.4	5,108.2	0.00	0.00	0.00	
15,800.0	89.65	90.00	10,730.8	665.0	5,175.4	5,208.0	0.00	0.00	0.00	
15,900.0	89.65	90.00	10,731.5	665.0	5,275.4	5,307.8	0.00	0.00	0.00	
16,000.0	89.65	90.00	10,732.1	665.0	5,375.4	5,407.6	0.00	0.00	0.00	
16,100.0	89.65	90.00	10,732.7	665.0	5,475.4	5,507.3	0.00	0.00	0.00	
16,200.0	89.65	90.00	10,733.3	665.0	5,575.4	5,607.1	0.00	0.00	0.00	
16,300.0	89.65	90.00	10,733.9	665.0	5,675.4	5,706.9	0.00	0.00	0.00	
16,400.0	89.65	90.00	10,734.5	665.0	5,775.4	5,806.7	0.00	0.00	0.00	
16,500.0	89.65	90.00	10,735.2	665.0	5,875.4	5,906.5	0.00	0.00	0.00	
16,600.0	89.65	90.00	10,735.8	665.0	5,975.4	6,006.2	0.00	0.00	0.00	
16,700.0	89.65	90.00	10,736.4	665.0	6,075.4	6,106.0	0.00	0.00	0.00	
16,800.0	89.65	90.00	10,737.0	665.0	6,175.4	6,205.8	0.00	0.00	0.00	
16,900.0	89.65	90.00	10,737.6	665.0	6,275.4	6,305.6	0.00	0.00	0.00	
17,000.0	89.65	90.00	10,738.3	665.0	6,375.4	6,405.4	0.00	0.00	0.00	
17,100.0	89.65	90.00	10,738.9	665.0	6,475.4	6,505.1	0.00	0.00	0.00	
17,200.0	89.65	90.00	10,739.5	665.0	6,575.4	6,604.9	0.00	0.00	0.00	
17,300.0	89.65	90.00	10,740.1	665.0	6,675.4	6,704.7	0.00	0.00	0.00	
17,400.0	89.65	90.00	10,740.7	665.0	6,775.4	6,804.5	0.00	0.00	0.00	
17,500.0	89.65	90.00	10,741.3	665.0	6,875.4	6,904.3	0.00	0.00	0.00	
17,600.0	89.65	90.00	10,742.0	665.0	6,975.4	7,004.1	0.00	0.00	0.00	
17,700.0	89.65	90.00	10,742.6	665.0	7,075.4	7,103.8	0.00	0.00	0.00	
17,800.0	89.65	90.00	10,743.2	665.0	7,175.4	7,203.6	0.00	0.00	0.00	
17,900.0	89.65	90.00	10,743.8	665.0	7,275.4	7,303.4	0.00	0.00	0.00	
18,000.0	89.65	90.00	10,744.4	665.0	7,375.4	7,403.2	0.00	0.00	0.00	
18,100.0	89.65	90.00	10,745.0	665.0	7,475.4	7,503.0	0.00	0.00	0.00	
18,200.0	89.65	90.00	10,745.7	665.0	7,575.4	7,602.7	0.00	0.00	0.00	
18,300.0	89.65	90.00	10,746.3	665.0	7,675.4	7,702.5	0.00	0.00	0.00	
18,400.0	89.65	90.00	10,746.9	665.0	7,775.4	7,802.3	0.00	0.00	0.00	
18,500.0	89.65	90.00	10,747.5	665.0	7,875.4	7,902.1	0.00	0.00	0.00	
18,600.0	89.65	90.00	10,748.1	665.0	7,975.4	8,001.9	0.00	0.00	0.00	
18,700.0	89.65	90.00	10,748.8	665.0	8,075.4	8,101.6	0.00	0.00	0.00	
18,800.0	89.65	90.00	10,749.4	665.0	8,175.4	8,201.4	0.00	0.00	0.00	

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)
18,900.0	89.65	90.00	10,750.0	665.0	8,275.4	8,301.2	0.00	0.00	0.00
19,000.0	89.65	90.00	10,750.6	665.0	8,375.4	8,401.0	0.00	0.00	0.00
19,100.0	89.65	90.00	10,751.2	665.0	8,475.4	8,500.8	0.00	0.00	0.00
19,200.0	89.65	90.00	10,751.8	665.0	8,575.4	8,600.5	0.00	0.00	0.00
19,300.0	89.65	90.00	10,752.5	665.0	8,675.4	8,700.3	0.00	0.00	0.00
19,400.0	89.65	90.00	10,753.1	665.0	8,775.4	8,800.1	0.00	0.00	0.00
19,500.0	89.65	90.00	10,753.7	665.0	8,875.4	8,899.9	0.00	0.00	0.00
19,600.0	89.65	90.00	10,754.3	665.0	8,975.3	8,999.7	0.00	0.00	0.00
19,700.0	89.65	90.00	10,754.9	665.0	9,075.3	9,099.4	0.00	0.00	0.00
19,800.0	89.65	90.00	10,755.5	665.0	9,175.3	9,199.2	0.00	0.00	0.00
19,900.0	89.65	90.00	10,756.2	665.0	9,275.3	9,299.0	0.00	0.00	0.00
20,000.0	89.65	90.00	10,756.8	665.0	9,375.3	9,398.8	0.00	0.00	0.00
20,100.0	89.65	90.00	10,757.4	665.0	9,475.3	9,498.6	0.00	0.00	0.00
20,200.0	89.65	90.00	10,758.0	665.0	9,575.3	9,598.4	0.00	0.00	0.00
20,300.0	89.65	90.00	10,758.6	665.0	9,675.3	9,698.1	0.00	0.00	0.00
20,400.0	89.65	90.00	10,759.3	665.0	9,775.3	9,797.9	0.00	0.00	0.00
20,500.0	89.65	90.00	10,759.9	665.0	9,875.3	9,897.7	0.00	0.00	0.00
20,600.0	89.65	90.00	10,760.5	665.0	9,975.3	9,997.5	0.00	0.00	0.00
20,693.9	89.65	90.00	10,761.1	665.0	10,069.2	10,091.1	0.00	0.00	0.00

TD at 20693.9

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
FBHL	0.00	0.00	10,761.4	677.5	10,068.4	395,812.98	1,219,709.96	48° 2' 39.440 N	103° 33' 43.230 W

- plan misses target center by 12.5ft at 20693.0ft MD (10761.1 TVD, 665.0 N, 10068.4 E)
- Point

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,100.0	2,100.0	13 3/8"	13.375	17.500
10,994.5	10,701.0	7"	7.000	8.750

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Direction (°)
1,920.0	2,051.5	Pierre			
4,566.1	4,697.5	Greenhorn			
4,969.1	5,100.5	Mowry			
5,391.1	5,522.5	Dakota			
6,407.2	6,538.5	Rierdon			
6,896.2	7,027.5	Dunham Salt			
6,942.2	7,073.5	Dunham Salt Base			
7,205.2	7,336.5	Pine Salt			
7,229.2	7,360.5	Pine Salt Base			
7,291.2	7,422.5	Opeche Salt			
7,371.2	7,502.5	Opeche Salt Base			
7,615.2	7,746.5	Amsden			
7,771.2	7,902.5	Tyler			
7,994.2	8,125.5	Otter/Base Minnelusa			
8,336.2	8,467.5	Kibbey Lime			
8,484.2	8,615.5	Charles Salt			
9,163.2	9,294.5	Base Last Salt			
9,377.2	9,508.5	Mission Canyon			
9,926.2	10,057.5	Lodgepole			
10,765.0	10,787.5	False Bakken			
10,795.4	10,799.5	Upper Bakken Shale			
10,898.7	10,826.5	Middle Bakken (Top of Target)			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			Comment
		+N-S (ft)	+E-W (ft)		
2,100.0	2,100.0	0.0	0.0		Start Build 5.00
2,110.0	2,110.0	0.0	0.0		Start 5719.7 hold at 2110.0 MD
7,829.7	7,829.4	50.0	0.0		Start Drop -5.00
7,839.7	7,839.4	50.0	0.0		Start 2160.6 hold at 7839.7 MD
10,000.2	10,000.0	50.0	0.0		Start 223.4 hold at 10000.2 MD
10,223.6	10,223.4	50.0	0.0		Start Build 12.00 KOP
10,970.7	10,700.9	283.3	413.2		Start 23.8 hold at 10970.7 MD EOC
10,994.5	10,701.0	295.0	434.0		Start DLS 2.00 TFO 90.10
12,466.8	10,710.2	665.0	1,842.3		Start 8227.1 hold at 12466.8 MD
20,693.9	10,761.1	665.0	10,069.2		TD at 20693.9



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.
28554

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

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date November 5, 2014	<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	NDAC 43-02-03-55 Waiver

Well Name and Number Wade Federal 5300 31-30 2B					
Footages 1329 F S L	240 F W L	Qtr-Qlr Lot3	Section 30	Township 153 N	Range 100 W
Field Baker	Pool Bakken	County McKenzie			

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

Name of Contractor(s) Advanced Energy Services			
Address	City	State	Zip Code

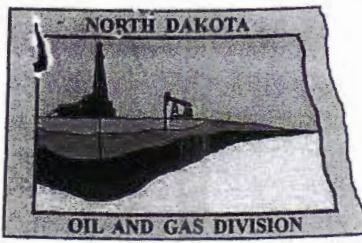
DETAILS OF WORK

Oasis requests permission for suspension of drilling for up to 90 days for the referenced well under NDAC 43-02-03-55. Oasis intends to drill the surface hole with freshwater based drilling mud and set surface casing with a small drilling rig and move off within 3 to 5 days. The casing will be set at a depth pre-approved by the NDIC per the Application for Permit to Drill NDAC 43-02-03-21. No saltwater will be used in the drilling and cementing operations of the surface casing. Once the surface casing is cemented, a plug or mechanical seal will be placed at the top of the casing to prevent any foreign matter from getting into the well. A rig capable of drilling to TD will move onto the location within the 90 days previously outlined to complete the drilling and casing plan as per the APD. The undersigned states that this request for suspension of drilling operations in accordance with the Subsection 4 of Section 43-02-03-55 of the NDAC, is being requested to take advantage of the cost savings and time savings of using an initial rig that is smaller than the rig necessary to drill a well to total depth but is not intended to alter or extend the terms and conditions of, or suspend any obligation under, any oil and gas lease with acreage in or under the spacing or drilling unit for the above-referenced well. Oasis understands NDAC 43-02-03-31 requirements regarding confidentiality pertaining to this permit. The lined reserve pit will be fenced immediately after construction if the well pad is located in a pasture (NDAC 43-02-03-19 & 19.1). Oasis will plug and abandon the well and reclaim the well site if the well is not drilled by the larger rotary rig within 90 days after spudding the well with the smaller drilling rig.

NOTIFY NDIC INSPECTOR RICHARD DUNN AT 701-770-3554 WITH SPUD & TD INFO.

Company Oasis Petroleum North America, LLC	Telephone Number (281) 404-9562	
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature 	Printed Name Lauri M. Stanfield	
Title Regulatory Specialist	Date November 3, 2014	
Email Address Istanfield@oasispetroleum.com		

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date November 04, 2014	
By Alice D. Webber	
Title Engineering Technician	



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.dmr.nd.gov/oilgas

28554

BRANDI TERRY
OASIS PETROLEUM NORTH AMERICA LLC
1001 FANNIN STE 1500
HOUSTON, TX 77002 USA

Date: 6/9/2014

RE: CORES AND SAMPLES

Well Name: **WADE FEDERAL 5300 31-30 2B** Well File No.: **28554**
Location: **LOT3 30-153-100** County: **MCKENZIE**
Permit Type: **Development - HORIZONTAL**
Field: **BAKER** Target Horizon: **BAKKEN**

Dear BRANDI TERRY:

North Dakota Century Code 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 under North Dakota Century Code: Section 38-08-04 and North Dakota Administrative Code: Section 43-02-03-38.1.
- 2) Samples: The Operator is to begin collecting sample drill cuttings no lower than the:
Base of the Last Charles Salt
 - Sample cuttings shall be collected at:
 - o 30' maximum intervals through all vertical and build sections.
 - o 100' maximum intervals through any horizontal sections.
 - Samples must be washed, dried, placed in standard sample envelopes (3" x 4.5"), packed in the correct order into standard sample boxes (3.5" x 5.25" x 15.25").
 - Samples boxes are to be carefully identified with a label that indicates the operator, well name, well file number, American Petroleum Institute (API) number, location and depth of samples; and forwarded in to the state core and sample library within 30 days of the completion of drilling operations.
- 3) Cores: Any cores cut shall be preserved in correct order, boxed in standard core boxes (4.5", 4.5", 35.75"), and the entire core forwarded to the state core and samples library within 180 days of completion of drilling operations. Any extension of time must have approval on a Form 4 Sundry Notice.

All cores, core chips, and samples must be shipped, prepaid, to the state core and samples library at the following address:

**ND Geological Survey Core Library
2835 Campus Road, Stop 8156
Grand Forks, ND 58202**

North Dakota Century Code 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

Stephen Fried
Geologist



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)

A circular stamp featuring a stylized evergreen tree in the center. The date "MAY 2014" is printed in a bold, sans-serif font directly below the tree. The entire circle is bordered by a continuous sequence of numbers: 1, 2, 3, 2, 3, 2, 4, 2, 5, 2, 6, 2, 7, 2, 8, 2, 9, 3, 0, 3, 1, 1-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23.

Well File No.
28554

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

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date March 26, 2014	<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	Waiver to rule Rule 43-02-03-31

Well Name and Number

Wade Federal 5300 31-30 2B

Footages 1329 F S L	Qtr-Qtr 240 F W L	Section Lot 4	Township 30	Range 153 N
Field	Pool Bakken		County McKenzie	

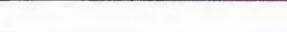
24-HOUR PRODUCTION RATE			
Before		After	
Oil	Bbls	Oil	Bbls
Water	Bbls	Water	Bbls
Gas	MCF	Gas	MCF

Name of Contractor(s)

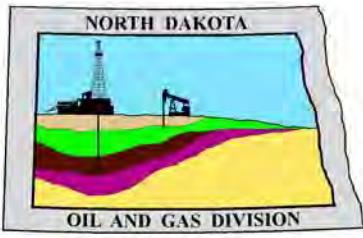
Address	City	State	Zip Code
---------	------	-------	----------

The Oasis Petroleum Wade Federal 5300 21-30H located within a mile of subject location

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.

Company Oasis Petroleum North America LLC		Telephone Number 281-404-9491
Address 1001 Fannin, Suite 1500		
City Houston		State TX
		Zip Code 77002
Signature 	Printed Name Chelsea Covington	
Title Regulatory Assistant	Date March 26, 2014	
Email Address ccovington@oasispetroleum.com		

FOR STATE USE ONLY	
<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date	6-5-2014
By	
Title	Stephen Fried Geologist



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

June 5, 2014

Chelsea Covington
Regulatory Assistant
OASIS PETROLEUM NORTH AMERICA LLC
1001 Fannin Suite 1500
Houston, TX 77002

**RE: HORIZONTAL WELL
WADE FEDERAL 5300 31-30 2B
LOT3 Section 30-153N-100W
McKenzie County
Well File # 28554**

Dear Chelsea:

Pursuant to Commission Order No. 23752, 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 **500'** setback from the north & south boundaries and **200'** setback from the east & west boundaries within the 1280 acre spacing unit consisting of Sections 29 & 30 T153N R100W. **Tool error is not required pursuant to order.**

PERMIT STIPULATIONS: Effective June 1, 2014, a covered leak-proof container (with placard) for filter sock disposal must be maintained on the well site beginning when the well is spud, and must remain on-site during clean-out, completion, and flow-back whenever filtration operations are conducted. Due to drainage adjacent to the well site, a dike is required surrounding the entire location. OASIS PETROLEUM NORTH AMERICA LLC must take into consideration NDAC 43-02-03-28 (Safety Regulation) when contemplating simultaneous operations on the above captioned location. Pursuant to NDAC 43-02-03-28 (Safety Regulation) "No boiler, portable electric lighting generator, or treater shall be placed nearer than 150 feet to any producing well or oil tank." OASIS PETRO NO AMER must contact NDIC Field Inspector Richard Dunn at 701-770-3554 prior to location construction.

Drilling pit

NDAC 43-02-03-19.4 states that "a pit may be utilized to bury drill cuttings and solids generated during well drilling and completion operations, providing the pit can be constructed, used and reclaimed in a manner that will prevent pollution of the land surface and freshwaters. Reserve and circulation of mud system through earthen pits are prohibited. All pits shall be inspected by an authorized representative of the director prior to lining and use. Drill cuttings and solids must be stabilized in a manner approved by the director prior to placement in a cuttings pit."

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. Based on the azimuth of the proposed lateral the maximum legal coordinate from the well head is: 10082'E.

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.

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.

Survey points shall be of such frequency to accurately determine the entire location of the well bore.

Specifically, the Horizontal and Directional well survey frequency is 100 feet in the vertical, 30 feet in the curve (or when sliding) and 90 feet in the lateral.

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 (1) a suite of open hole logs from which formation tops and porosity zones can be determined, (2) a Gamma Ray Log run from total depth to ground level elevation of the well bore, and (3) a log from which the presence and quality of cement can be determined (Standard CBL or Ultrasonic cement evaluation log) in every well in which production or intermediate casing has been set, this log must be run prior to completing the well. All logs run must be submitted free of charge, as one digital TIFF (tagged image file format) copy and one digital LAS (log ASCII) formatted copy. Digital logs may be submitted on a standard CD, DVD, or attached to an email sent to digitallogs@nd.gov

Thank you for your cooperation.

Sincerely,

Alice Webber
Engineering Tech



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 New Location	Type of Well Oil & Gas	Approximate Date Work Will Start 04 / 01 / 2014	Confidential Status No
Operator OASIS PETROLEUM NORTH AMERICA LLC		Telephone Number 281-404-9491	
Address 1001 Fannin Suite 1500		City Houston	State TX Zip Code 77002

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 WADE FEDERAL				Well Number 5300 31-30 2B			
Surface Footages 1329 F S L		Qtr-Qtr LOT3	Section 30	Township 153 N	Range 100 W	County McKenzie	
Longstring Casing Point Footages 1624 F S L		Qtr-Qtr LOT3	Section 30	Township 153 N	Range 100 W	County McKenzie	
Longstring Casing Point Coordinates From Well Head 295 N From WH 434 E From WH		Azimuth 60.55 °	Longstring Total Depth 10995 Feet MD 10701 Feet TVD				
Bottom Hole Footages From Nearest Section Line 1994 F S L		Qtr-Qtr NESE	Section 29	Township 153 N	Range 100 W	County Williams	
Bottom Hole Coordinates From Well Head 665 N From WH 10069 E From WH		KOP Lateral 1 10224 Feet MD	Azimuth Lateral 1 90.0 °	Estimated Total Depth Lateral 1 20694 Feet MD 10761 Feet TVD			
Latitude of Well Head 48 ° 02 ' 32.78 "		Longitude of Well Head -103 ° 36 ' 11.41 "	NAD Reference NAD83	Description of Spacing Unit: Sections 29 & 30 T153N R100W (Subject to NDIC Approval)			
Ground Elevation 2046 Feet Above S.L.		Acres in Spacing/Drilling Unit 1280		Spacing/Drilling Unit Setback Requirement 500 Feet N/S 200 Feet E/W		Industrial Commission Order 23752	
North Line of Spacing/Drilling Unit 10513 Feet		South Line of Spacing/Drilling Unit 10522 Feet		East Line of Spacing/Drilling Unit 5082 Feet		West Line of Spacing/Drilling Unit 5236 Feet	
Objective Horizons Bakken						Pierre Shale Top 1920	
Proposed Surface Casing	Size 9 - 5/8 "	Weight 36 Lb./Ft.	Depth 2100 Feet	Cement Volume 619 Sacks	NOTE: Surface hole must be drilled with fresh water and surface casing must be cemented back to surface.		
Proposed Longstring Casing	Size 7 - "	Weight(s) 29/32 Lb./Ft.	Longstring Total Depth 10995 Feet MD 10701 Feet TVD			Cement Volume 800 Sacks	Cement Top 3891 Feet
Base Last Charles Salt (If Applicable) 9163 Feet		NOTE: Intermediate or longstring casing string must be cemented above the top Dakota Group Sand.					
Proposed Logs Triple Combo: KOP-KibbyGR/Res to BSC GR-To Surf CND thru Dakota							
Drilling Mud Type (Vertical Hole - Below Surface Casing) Invert				Drilling Mud Type (Lateral) Salt Water Gel			
Survey Type in Vertical Portion of Well MWD Every 100 Feet		Survey Frequency: Build Section 30 Feet		Survey Frequency: Lateral 90 Feet		Survey Contractor Ryan	

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**Documents forwarded by email: Drill plan with drilling fluids, Well Summary with casing/cement plans, Directional Plan & Plot, Plots**

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 N	Range W	County	
Bottom Hole Footages From Nearest Section Line F L		Qtr-Qtr	Section	Township N	Range W	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 N	Range W	County	
Bottom Hole Footages From Nearest Section Line F L		Qtr-Qtr	Section	Township N	Range W	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 N	Range W	County	
Bottom Hole Footages From Nearest Section Line F L		Qtr-Qtr	Section	Township N	Range W	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 N	Range W	County	
Bottom Hole Footages From Nearest Section Line F L		Qtr-Qtr	Section	Township N	Range W	County	

I hereby swear or affirm the information provided is true, complete and correct as determined from all available records.

Date

03 / 26 / 2014

ePermit

Printed Name

Chelsea Covington

Title

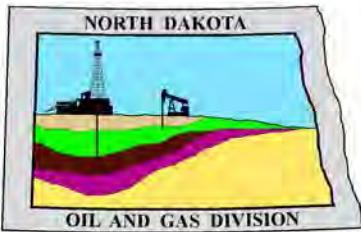
Regulatory Assistant

FOR STATE USE ONLY

Permit and File Number 28554	API Number 33 - 053 - 05995
Field BAKER	
Pool BAKKEN	Permit Type DEVELOPMENT

FOR STATE USE ONLY

Date Approved 6 / 5 / 2014
By Alice Webber
Title Engineering Tech



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

April 9, 2014

**RE: Filter Socks and Other Filter Media
Leakproof Container Required
Oil and Gas Wells**

Dear Operator,

North Dakota Administrative Code Section 43-02-03-19.2 states in part that all waste material associated with exploration or production of oil and gas must be properly disposed of in an authorized facility in accord with all applicable local, state, and federal laws and regulations.

Filtration systems are commonly used during oil and gas operations in North Dakota. The Commission is very concerned about the proper disposal of used filters (including filter socks) used by the oil and gas industry.

Effective June 1, 2014, a container must be maintained on each well drilled in North Dakota beginning when the well is spud and must remain on-site during clean-out, completion, and flow-back whenever filtration operations are conducted. The on-site container must be used to store filters until they can be properly disposed of in an authorized facility. Such containers must be:

- leakproof to prevent any fluids from escaping the container
- covered to prevent precipitation from entering the container
- placard to indicate only filters are to be placed in the container

If the operator will not utilize a filtration system, a waiver to the container requirement will be considered, but only upon the operator submitting a Sundry Notice (Form 4) justifying their request.

As previously stated in our March 13, 2014 letter, North Dakota Administrative Code Section 33-20-02.1-01 states in part that every person who transports solid waste (which includes oil and gas exploration and production wastes) is required to have a valid permit issued by the North Dakota Department of Health, Division of Waste Management. Please contact the Division of Waste Management at (701) 328-5166 with any questions on the solid waste program. Note oil and gas exploration and production wastes include produced water, drilling mud, invert mud, tank bottom sediment, pipe scale, filters, and fly ash.

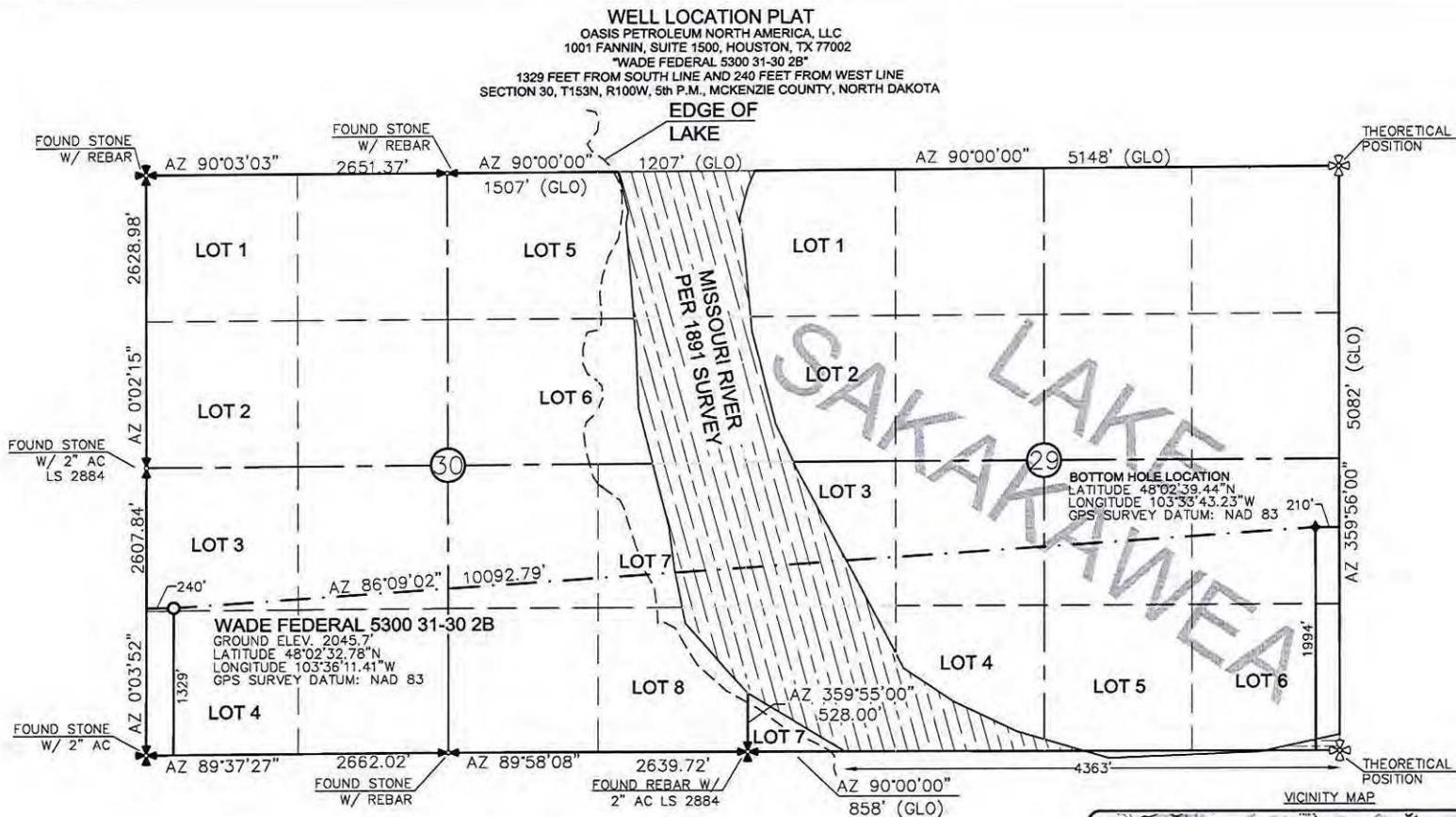
Thank you for your cooperation.

Sincerely,

Bruce E. Hicks
Assistant Director

© 2014, INTERSTATE ENGINEERING, INC.

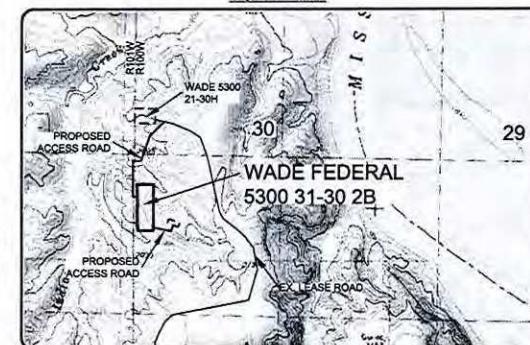
Project No.: S129-38101	Date: JAN 2014
OASIS PETROLEUM NORTH AMERICA, LLC WELL LOCATION PLAT SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA	
Drawn By: B.A.S.	Checked By: D.D.S.
Interstate Engineering, Inc. PO Box 648 424 East Main Street Sisseton, SD 57070 Ph: (605) 433-5617 Fax: (605) 433-5618 www.interstateeng.com One office in Minnesota, Seven offices in South Dakota	



THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN, PLS. REGISTRATION NUMBER 3880 ON 3/18/14 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.

MONUMENT - RECOVERED
MONUMENT - NOT RECOVERED

DARYL D. KASEMAN LS-3880



1/8

DRILLING PLAN							
OPERATOR	Oasis Petroleum			COUNTY/STATE	McKenzie Co., ND		
WELL NAME	Wade Federal 5300 31-30 2B			RIG	Nabors 486		
WELL TYPE	Horizontal Middle Bakken			Surface Location (survey plat):	1329'		
LOCATION	NW SW 30-153N-100W			240' FWL			
EST. T.D.	20,693'			GROUND ELEV:	2,045'		
TOTAL LATERAL:	9,699'			KB ELEV:	2,070'		
MARKER	TVD	Subsea TVD	LOGS:	Type	Interval		
Pierre	NDIC MAP	1,920		OH Logs: Request Log waiver based on the Wade Federal 5300 21-30H 2,150' N of surface location			
Greenhorn		4,566	-2,496	CBL/GR: Above top of cement/GR to base of casing			
Mowry		4,969	-2,899	MWD GR: KOP to lateral TD			
Dakota		5,391	-3,321				
Rierdon		6,407	-4,337				
Dunham Salt		6,896	-4,826				
Dunham Salt Base		6,942	-4,872				
Pine Salt		7,205	-5,135				
Pine Salt Base		7,229	-5,159				
Opeche Salt		7,291	-5,221				
Opeche Salt Base		7,371	-5,301				
Amsden		7,615	-5,545				
Tyler		7,771	-5,701				
Otter/Base Minnelusa		7,994	-5,924	DST'S: None planned			
Kibbey Lime		8,336	-6,266				
Charles Salt		8,484	-6,414	CORES: None planned			
Base Last Salt		9,163	-7,093				
Mission Canyon		9,377	-7,307				
Lodgepole		9,926	-7,856				
False Bakken		10,656	-8,586				
Upper Bakken Shale		10,668	-8,598	MUDLOGGING: Two-Man: Begin 200' above Kibbey			
Middle Bakken (Top of Target)		10,695	-8,625	30' samples in curve and lateral			
Middle Bakken (Base of target)		10,706	-8,636				
Lower Bakken Shale		10,719	-8,649				
Threeforks		10,744	-8,674	BOP: 11" 5000 psi blind, pipe & annular			
Est. Dip Rate:	-0.35						
Max. Anticipated BHP:	4645			Surface Formation: Glacial till			
MUD:	Interval	Type	WT	Vis	WL	Remarks	
Surface:	0' -	2,100' FW	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,100' -	10,994' Invert	9.5-10.4	40-50	30+HtHp	Circ Mud Tanks	
Lateral:	10,994' -	20,693' 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"	2,100'	To Surface	12	100' into Pierre
Intermediate:	7"	29/32#	8-3/4"	10,994'	3891	24	1500' above Dakota
Production Liner:	4.5"	11.6#	6"	20,693'	TOL @ 10,174'		50' above KOP
PROBABLE PLUGS, IF REQ'D:							
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI	
Surface:	2,100	2,100	1329 FSL	240 FWL	Sec. 30 T153N R100W		Survey Company:
KOP:	10,224'	10,224'	1379 FSL	240 FWL	Sec. 30 T153N R100W	60.6	Build Rate: 12 deg /100'
EOC:	10,971'	10,701'	1612 FSL	653 FWL	Sec. 30 T153N R100W		
Casing Point:	10,994'	10,701'	1624 FSL	674 FWL	Sec. 30 T153N R100W	60.6	
Middle Bakken Lateral TD:	20,693'	10,761'	1994 FSL	210 FEL	Sec. 29 T153N R100W	90.0	
Comments:							
Request Log waiver based on the Wade Federal 5300 21-30H 2,150' N of surface location							
"No frac string planned"							
35 packers, 20 sleeves							
Oasis Petroleum does not use Diesel Fuel, as defined by the US EPA in the list below, in our hydraulic fracture operations.							
68334-30-5 (Primary Name: Fuels, diesel)							
68476-34-6 (Primary Name: Fuels, diesel, No. 2)							
68476-30-2 (Primary Name: Fuel oil No. 2)							
68476-31-3 (Primary Name: Fuel oil, No. 4)							
8008-20-6 (Primary Name: Kerosene)							
Geology: N. Gabelman	1/20/2014			Engineering: C. Gilbert 1/29/14			



Oasis Petroleum
Well Summary
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
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' - 2100'	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse	Burst	Tension
		(psi) / a	(psi) / b	(1000 lbs) / c
0' - 2100'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.05	3520 / 3.58	453 / 2.74

API Rating & Safety Factor

- a) Based on full casing evacuation with 9 ppg fluid on backside (2100' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2100' setting depth).
- c) Based on string weight in 9 ppg fluid at 2100' TVD plus 100k# overpull. (Buoyed weight equals 65k 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: **446 sks** (236 bbls), 11.5 lb/gal, 2.97 cu. Ft./sk Varicem Cement with 0.125 il/sk Lost Circulation Additive

Tail Slurry: **173 sks** (62 bbls), 13.0 lb/gal, 2.01 cu.ft./sk Varicem with .125 lb/sk Lost Circulation Agent

Oasis Petroleum
Well Summary
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
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' - 6696'	29	P-110	LTC	6.184"	6.059"	5980	7970	8770
7"	6696' - 10224'	32	HCP-110	LTC	6.094"	6.000***	6730	8970	9870
7"	10224' - 10701'	29	P-110	LTC	6.184"	6.059"	5980	7970	8770

**Special Drift 7" 32# to 6.0"

Interval	Length	Description	Collapse (psi) a	Burst		Tension (1000 lbs) c
				(psi) b		
0' - 6696'	6696'	7", 29#, P-110, LTC, 8rd	8530 / 2.44*	11220 / 1.19	797 / 2.14	
6696' - 10224'	3528'	7", 32#, HCP-110, LTC, 8rd	11820 / 2.22*	12460 / 1.29		
6696' - 10224'	3528'	7", 32#, HCP-110, LTC, 8rd	11820 / 1.05**	12460 / 1.29		
10224' - 10701'	477'	7", 29#, P-110, LTC, 8rd	8530 / 1.49*	11220 / 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 9000 psig max press for stimulation plus 10.2 ppg fluid in casing and 9 ppg fluid on backside-to 10994' TVD.
- c) Based on string weight in 10 ppg fluid, (272k 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.

Mix and pump the following slurry

Pre-flush (Spacer):

100 bbls Saltwater
20 bbls CW8
20 bbls Fresh Water

Lead Slurry:

199 sks (81 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 (165 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
Wade Federal 5300 31-30 2B
Section 30 T153N R100W
McKenzie County, ND

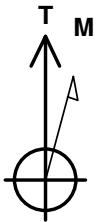
PRODUCTION LINER

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10174' - 20748'	11.6	P-110	BTC	4.000"	3.875"	2270	3020	3780

Interval	Length	Description	Collapse (psi) a	Burst (psi) b	Tension (1000 lbs) c
10174' - 20748'	10574	4-1/2", 11.6 lb, P-110, BTC	7560 / 1.42	10690 / 1.10	385 / 1.87

API Rating & Safety Factor

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10761' TVD.
- b) Burst pressure based on 9000 psi treating pressure with 10.2 ppg internal fluid gradient and 9 ppg external fluid gradient @ 10761' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 105k lbs.) plus 100k lbs overpull.

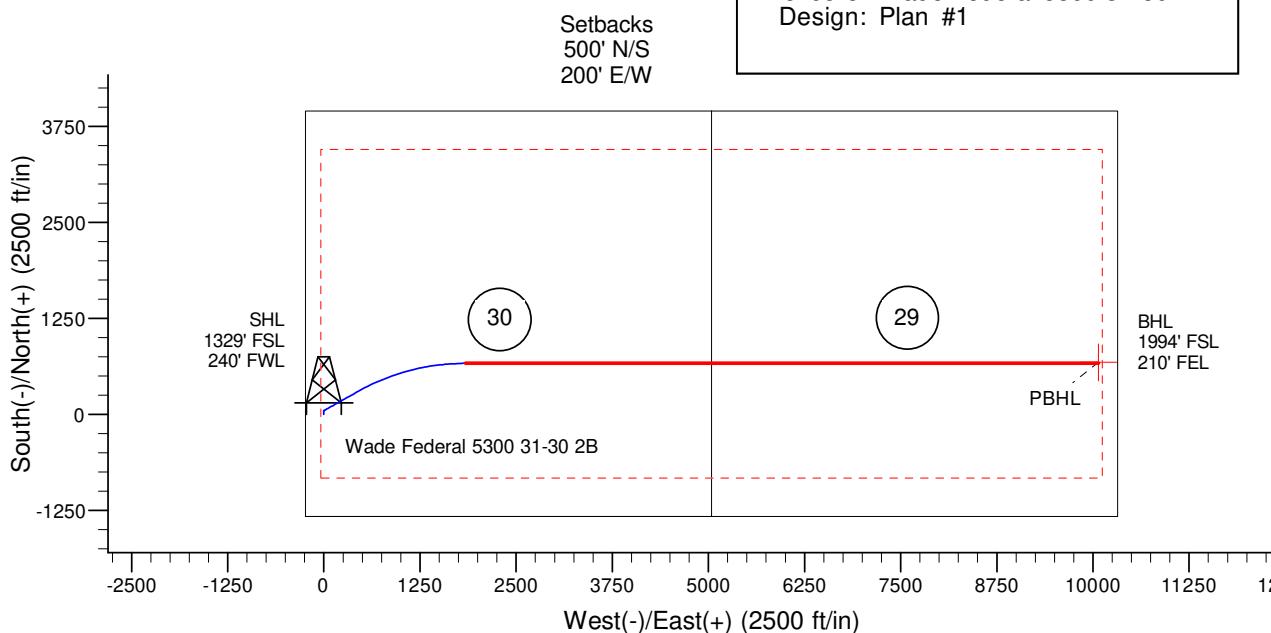


Azimuths to True North
Magnetic North: 8.18°

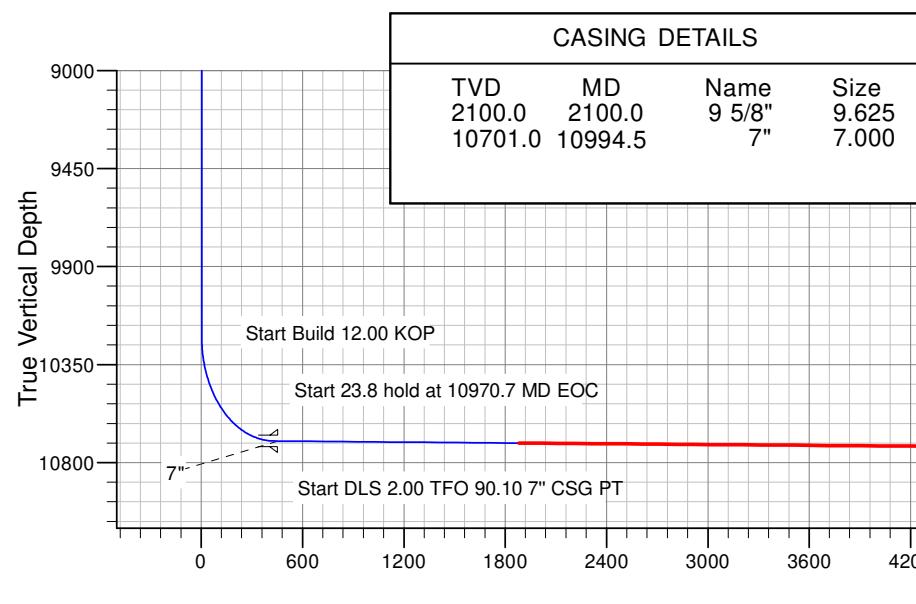
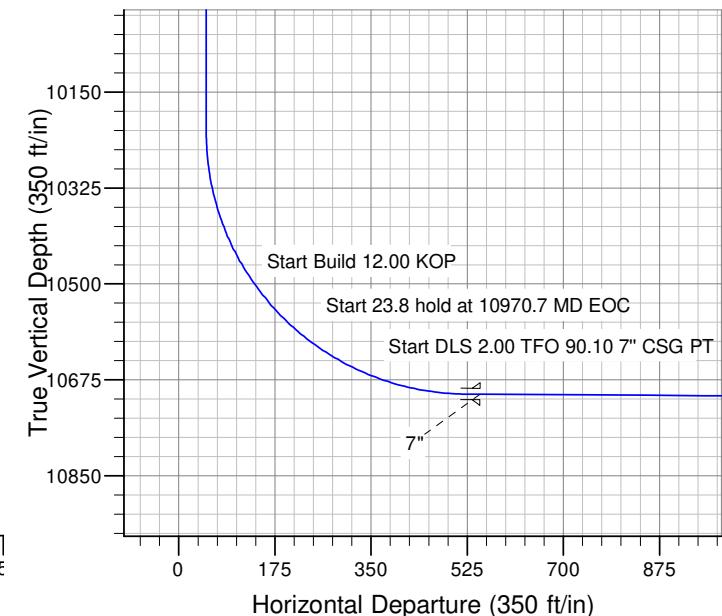
Magnetic Field
Strength: 56489.0snT
Dip Angle: 72.95°
Date: 1/28/2014
Model: IGRF200510



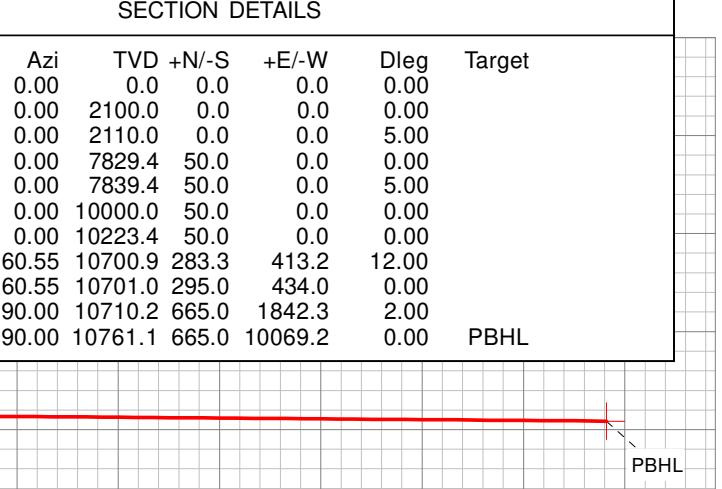
Project: Indian Hills
Site: 153N-100W-29/30
Well: Wade Federal 5300 31-30 2B
Wellbore: Wade Federal 5300 31-30 2B
Design: Plan #1



SITE DETAILS: 153N-100W-29/30	
Site Centre Latitude:	48° 2' 32.580 N
Longitude:	103° 36' 11.410 W
Positional Uncertainty:	0.0
Convergence:	-2.31
Local North:	True



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	0.00	
2100.0	0.00	0.00	2100.0	0.0	0.0	0.00	0.00	
2110.0	0.50	0.00	2110.0	0.0	0.0	5.00		
7829.7	0.50	0.00	7829.4	50.0	0.0	0.00	0.00	
7839.7	0.00	0.00	7839.4	50.0	0.0	5.00		
10000.2	0.00	0.00	10000.0	50.0	0.0	0.00	0.00	
10223.6	0.00	0.00	10223.4	50.0	0.0	0.00	0.00	
10970.7	89.65	60.55	10700.9	283.3	413.2	12.00		
10994.5	89.65	60.55	10701.0	295.0	434.0	0.00		
12466.8	89.65	90.00	10710.2	665.0	1842.3	2.00		
20693.9	89.65	90.00	10761.1	665.0	10069.2	0.00	PBHL	



Oasis

**Indian Hills
153N-100W-29/30
Wade Federal 5300 31-30 2B**

Wade Federal 5300 31-30 2B

Plan: Plan #1

Standard Planning Report

19 May, 2014

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	Plan #1		

Project	Indian Hills	
Map System:	US State Plane 1983	
Geo Datum:	North American Datum 1983	
Map Zone:	North Dakota Northern Zone	

Site	153N-100W-29/30
Site Position:	Northing: 395,521.43 ft
From: Lat/Long	Easting: 1,209,621.64 ft
Position Uncertainty: 0.0 ft	Slot Radius: 13.200 in

Latitude: 48° 2' 32.580 N

Longitude: 103° 36' 11.410 W

Grid Convergence: -2.31 °

Well	Wade Federal 5300 31-30 2B
Well Position	+N/-S 20.3 ft Northing: 395,541.68 ft Latitude: 48° 2' 32.780 N
	+E/-W 0.0 ft Easting: 1,209,622.46 ft Longitude: 103° 36' 11.410 W
Position Uncertainty	0.0 ft Wellhead Elevation: Ground Level: 2,045.0 ft

Latitude: 48° 2' 32.780 N

Longitude: 103° 36' 11.410 W

Ground Level: 2,045.0 ft

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	1/28/2014	8.18	72.95	56,489

Design	Plan #1
Audit Notes:	
Version:	Phase: PROTOTYPE Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (ft) +N/-S (ft) +E/-W (ft) Direction (°)
	0.0 0.0 0.0 86.22

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,110.0	0.50	0.00	2,110.0	0.0	0.0	5.00	5.00	0.00	0.00	0.00
7,829.7	0.50	0.00	7,829.4	50.0	0.0	0.00	0.00	0.00	0.00	0.00
7,839.7	0.00	0.00	7,839.4	50.0	0.0	5.00	-5.00	0.00	180.00	
10,000.2	0.00	0.00	10,000.0	50.0	0.0	0.00	0.00	0.00	0.00	0.00
10,223.6	0.00	0.00	10,223.4	50.0	0.0	0.00	0.00	0.00	0.00	0.00
10,970.7	89.65	60.55	10,700.9	283.3	413.2	12.00	12.00	0.00	60.55	
10,994.5	89.65	60.55	10,701.0	295.0	434.0	0.00	0.00	0.00	0.00	
12,466.8	89.65	90.00	10,710.2	665.0	1,842.3	2.00	0.00	2.00	90.10	
20,693.9	89.65	90.00	10,761.1	665.0	10,069.2	0.00	0.00	0.00	0.00	PBHL

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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
1,920.0	0.00	0.00	1,920.0	0.0	0.0	0.0	0.00	0.00	0.00
Pierre									
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
Start Build 5.00 - 9 5/8"									
2,110.0	0.50	0.00	2,110.0	0.0	0.0	0.0	5.00	5.00	0.00
Start 5719.7 hold at 2110.0 MD									
2,200.0	0.50	0.00	2,200.0	0.8	0.0	0.1	0.00	0.00	0.00
2,300.0	0.50	0.00	2,300.0	1.7	0.0	0.1	0.00	0.00	0.00
2,400.0	0.50	0.00	2,400.0	2.6	0.0	0.2	0.00	0.00	0.00
2,500.0	0.50	0.00	2,500.0	3.4	0.0	0.2	0.00	0.00	0.00
2,600.0	0.50	0.00	2,600.0	4.3	0.0	0.3	0.00	0.00	0.00
2,700.0	0.50	0.00	2,700.0	5.2	0.0	0.3	0.00	0.00	0.00
2,800.0	0.50	0.00	2,800.0	6.1	0.0	0.4	0.00	0.00	0.00
2,900.0	0.50	0.00	2,900.0	6.9	0.0	0.5	0.00	0.00	0.00
3,000.0	0.50	0.00	3,000.0	7.8	0.0	0.5	0.00	0.00	0.00
3,100.0	0.50	0.00	3,100.0	8.7	0.0	0.6	0.00	0.00	0.00
3,200.0	0.50	0.00	3,200.0	9.6	0.0	0.6	0.00	0.00	0.00
3,300.0	0.50	0.00	3,300.0	10.4	0.0	0.7	0.00	0.00	0.00
3,400.0	0.50	0.00	3,400.0	11.3	0.0	0.7	0.00	0.00	0.00
3,500.0	0.50	0.00	3,499.9	12.2	0.0	0.8	0.00	0.00	0.00
3,600.0	0.50	0.00	3,599.9	13.0	0.0	0.9	0.00	0.00	0.00
3,700.0	0.50	0.00	3,699.9	13.9	0.0	0.9	0.00	0.00	0.00
3,800.0	0.50	0.00	3,799.9	14.8	0.0	1.0	0.00	0.00	0.00
3,900.0	0.50	0.00	3,899.9	15.7	0.0	1.0	0.00	0.00	0.00
4,000.0	0.50	0.00	3,999.9	16.5	0.0	1.1	0.00	0.00	0.00
4,100.0	0.50	0.00	4,099.9	17.4	0.0	1.1	0.00	0.00	0.00
4,200.0	0.50	0.00	4,199.9	18.3	0.0	1.2	0.00	0.00	0.00
4,300.0	0.50	0.00	4,299.9	19.2	0.0	1.3	0.00	0.00	0.00
4,400.0	0.50	0.00	4,399.9	20.0	0.0	1.3	0.00	0.00	0.00
4,500.0	0.50	0.00	4,499.9	20.9	0.0	1.4	0.00	0.00	0.00
4,566.1	0.50	0.00	4,566.0	21.5	0.0	1.4	0.00	0.00	0.00
Greenhorn									
4,600.0	0.50	0.00	4,599.9	21.8	0.0	1.4	0.00	0.00	0.00
4,700.0	0.50	0.00	4,699.9	22.6	0.0	1.5	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)
4,800.0	0.50	0.00	4,799.9	23.5	0.0	1.5	0.00	0.00	0.00
4,900.0	0.50	0.00	4,899.9	24.4	0.0	1.6	0.00	0.00	0.00
4,969.1	0.50	0.00	4,969.0	25.0	0.0	1.6	0.00	0.00	0.00
Mowry									
5,000.0	0.50	0.00	4,999.9	25.3	0.0	1.7	0.00	0.00	0.00
5,100.0	0.50	0.00	5,099.9	26.1	0.0	1.7	0.00	0.00	0.00
5,200.0	0.50	0.00	5,199.9	27.0	0.0	1.8	0.00	0.00	0.00
5,300.0	0.50	0.00	5,299.9	27.9	0.0	1.8	0.00	0.00	0.00
5,391.1	0.50	0.00	5,391.0	28.7	0.0	1.9	0.00	0.00	0.00
Dakota									
5,400.0	0.50	0.00	5,399.9	28.8	0.0	1.9	0.00	0.00	0.00
5,500.0	0.50	0.00	5,499.9	29.6	0.0	2.0	0.00	0.00	0.00
5,600.0	0.50	0.00	5,599.9	30.5	0.0	2.0	0.00	0.00	0.00
5,700.0	0.50	0.00	5,699.9	31.4	0.0	2.1	0.00	0.00	0.00
5,800.0	0.50	0.00	5,799.9	32.2	0.0	2.1	0.00	0.00	0.00
5,900.0	0.50	0.00	5,899.9	33.1	0.0	2.2	0.00	0.00	0.00
6,000.0	0.50	0.00	5,999.9	34.0	0.0	2.2	0.00	0.00	0.00
6,100.0	0.50	0.00	6,099.8	34.9	0.0	2.3	0.00	0.00	0.00
6,200.0	0.50	0.00	6,199.8	35.7	0.0	2.4	0.00	0.00	0.00
6,300.0	0.50	0.00	6,299.8	36.6	0.0	2.4	0.00	0.00	0.00
6,400.0	0.50	0.00	6,399.8	37.5	0.0	2.5	0.00	0.00	0.00
6,407.2	0.50	0.00	6,407.0	37.5	0.0	2.5	0.00	0.00	0.00
Rierdon									
6,500.0	0.50	0.00	6,499.8	38.4	0.0	2.5	0.00	0.00	0.00
6,600.0	0.50	0.00	6,599.8	39.2	0.0	2.6	0.00	0.00	0.00
6,700.0	0.50	0.00	6,699.8	40.1	0.0	2.6	0.00	0.00	0.00
6,800.0	0.50	0.00	6,799.8	41.0	0.0	2.7	0.00	0.00	0.00
6,896.2	0.50	0.00	6,896.0	41.8	0.0	2.8	0.00	0.00	0.00
Dunham Salt									
6,900.0	0.50	0.00	6,899.8	41.8	0.0	2.8	0.00	0.00	0.00
6,942.2	0.50	0.00	6,942.0	42.2	0.0	2.8	0.00	0.00	0.00
Dunham Salt Base									
7,000.0	0.50	0.00	6,999.8	42.7	0.0	2.8	0.00	0.00	0.00
7,100.0	0.50	0.00	7,099.8	43.6	0.0	2.9	0.00	0.00	0.00
7,200.0	0.50	0.00	7,199.8	44.5	0.0	2.9	0.00	0.00	0.00
7,205.2	0.50	0.00	7,205.0	44.5	0.0	2.9	0.00	0.00	0.00
Pine Salt									
7,229.2	0.50	0.00	7,229.0	44.7	0.0	2.9	0.00	0.00	0.00
Pine Salt Base									
7,291.2	0.50	0.00	7,291.0	45.3	0.0	3.0	0.00	0.00	0.00
Opecche Salt									
7,300.0	0.50	0.00	7,299.8	45.3	0.0	3.0	0.00	0.00	0.00
7,371.2	0.50	0.00	7,371.0	46.0	0.0	3.0	0.00	0.00	0.00
Opecche Salt Base									
7,400.0	0.50	0.00	7,399.8	46.2	0.0	3.0	0.00	0.00	0.00
7,500.0	0.50	0.00	7,499.8	47.1	0.0	3.1	0.00	0.00	0.00
7,600.0	0.50	0.00	7,599.8	48.0	0.0	3.2	0.00	0.00	0.00
7,615.2	0.50	0.00	7,615.0	48.1	0.0	3.2	0.00	0.00	0.00
Amsden									
7,700.0	0.50	0.00	7,699.8	48.8	0.0	3.2	0.00	0.00	0.00
7,771.2	0.50	0.00	7,771.0	49.4	0.0	3.3	0.00	0.00	0.00
Tyler									
7,800.0	0.50	0.00	7,799.8	49.7	0.0	3.3	0.00	0.00	0.00
7,829.7	0.50	0.00	7,829.4	50.0	0.0	3.3	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)	
Start Drop -5.00										
7,839.7	0.00	0.00	7,839.4	50.0	0.0	3.3	5.00	-5.00	0.00	
Start 2160.6 hold at 7839.7 MD										
7,900.0	0.00	0.00	7,899.8	50.0	0.0	3.3	0.00	0.00	0.00	
7,994.2	0.00	0.00	7,994.0	50.0	0.0	3.3	0.00	0.00	0.00	
Otter/Base Minnelusa										
8,000.0	0.00	0.00	7,999.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,099.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,199.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,299.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,336.2	0.00	0.00	8,336.0	50.0	0.0	3.3	0.00	0.00	0.00	
Kibbey Lime										
8,400.0	0.00	0.00	8,399.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,484.2	0.00	0.00	8,484.0	50.0	0.0	3.3	0.00	0.00	0.00	
Charles Salt										
8,500.0	0.00	0.00	8,499.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,599.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,699.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,799.8	50.0	0.0	3.3	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,899.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,999.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,099.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,163.2	0.00	0.00	9,163.0	50.0	0.0	3.3	0.00	0.00	0.00	
Base Last Salt										
9,200.0	0.00	0.00	9,199.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,299.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,377.2	0.00	0.00	9,377.0	50.0	0.0	3.3	0.00	0.00	0.00	
Mission Canyon										
9,400.0	0.00	0.00	9,399.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,499.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,599.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,699.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,799.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,899.8	50.0	0.0	3.3	0.00	0.00	0.00	
9,926.2	0.00	0.00	9,926.0	50.0	0.0	3.3	0.00	0.00	0.00	
Lodgepole										
10,000.2	0.00	0.00	10,000.0	50.0	0.0	3.3	0.00	0.00	0.00	
Start 223.4 hold at 10000.2 MD										
10,100.0	0.00	0.00	10,099.8	50.0	0.0	3.3	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,199.8	50.0	0.0	3.3	0.00	0.00	0.00	
10,223.6	0.00	0.00	10,223.4	50.0	0.0	3.3	0.00	0.00	0.00	
Start Build 12.00 KOP										
10,225.0	0.17	60.55	10,224.8	50.0	0.0	3.3	12.00	12.00	0.00	
10,250.0	3.17	60.55	10,249.8	50.4	0.6	4.0	12.00	12.00	0.00	
10,275.0	6.17	60.55	10,274.7	51.4	2.4	5.8	12.00	12.00	0.00	
10,300.0	9.17	60.55	10,299.5	53.0	5.3	8.8	12.00	12.00	0.00	
10,325.0	12.17	60.55	10,324.0	55.3	9.3	13.0	12.00	12.00	0.00	
10,350.0	15.17	60.55	10,348.3	58.2	14.5	18.3	12.00	12.00	0.00	
10,375.0	18.17	60.55	10,372.3	61.7	20.7	24.7	12.00	12.00	0.00	
10,400.0	21.17	60.55	10,395.8	65.8	28.0	32.3	12.00	12.00	0.00	
10,425.0	24.17	60.55	10,418.9	70.6	36.4	41.0	12.00	12.00	0.00	
10,450.0	27.17	60.55	10,441.4	75.9	45.9	50.8	12.00	12.00	0.00	
10,475.0	30.17	60.55	10,463.3	81.8	56.3	61.6	12.00	12.00	0.00	
10,500.0	33.17	60.55	10,484.6	88.2	67.7	73.4	12.00	12.00	0.00	

Oasis Petroleum

Planning Report

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Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)
10,525.0	36.17	60.55	10,505.2	95.2	80.1	86.2	12.00	12.00	0.00
10,550.0	39.17	60.55	10,525.0	102.7	93.4	100.0	12.00	12.00	0.00
10,575.0	42.17	60.55	10,543.9	110.7	107.6	114.7	12.00	12.00	0.00
10,600.0	45.17	60.55	10,562.0	119.2	122.6	130.2	12.00	12.00	0.00
10,625.0	48.17	60.55	10,579.1	128.2	138.5	146.6	12.00	12.00	0.00
10,650.0	51.17	60.55	10,595.3	137.5	155.1	163.8	12.00	12.00	0.00
10,675.0	54.17	60.55	10,610.5	147.3	172.4	181.7	12.00	12.00	0.00
10,700.0	57.17	60.55	10,624.6	157.5	190.3	200.3	12.00	12.00	0.00
10,725.0	60.17	60.55	10,637.6	167.9	208.9	219.6	12.00	12.00	0.00
10,750.0	63.17	60.55	10,649.4	178.8	228.1	239.4	12.00	12.00	0.00
10,765.0	64.96	60.55	10,656.0	185.4	239.8	251.5	12.00	12.00	0.00
False Bakken									
10,775.0	66.17	60.55	10,660.1	189.9	247.8	259.7	12.00	12.00	0.00
10,795.4	68.62	60.55	10,668.0	199.1	264.2	276.7	12.00	12.00	0.00
Upper Bakken Shale									
10,800.0	69.17	60.55	10,669.6	201.2	267.9	280.6	12.00	12.00	0.00
10,825.0	72.17	60.55	10,677.9	212.8	288.4	301.8	12.00	12.00	0.00
10,850.0	75.17	60.55	10,685.0	224.6	309.3	323.5	12.00	12.00	0.00
10,875.0	78.17	60.55	10,690.7	236.6	330.5	345.4	12.00	12.00	0.00
10,898.7	81.01	60.55	10,695.0	248.0	350.8	366.4	12.00	12.00	0.00
Middle Bakken (Top of Target)									
10,900.0	81.17	60.55	10,695.2	248.7	351.9	367.6	12.00	12.00	0.00
10,925.0	84.17	60.55	10,698.4	260.9	373.5	389.9	12.00	12.00	0.00
10,950.0	87.17	60.55	10,700.3	273.1	395.2	412.4	12.00	12.00	0.00
10,970.7	89.65	60.55	10,700.9	283.3	413.2	431.0	12.00	12.00	0.00
Start 23.8 hold at 10970.7 MD EOC									
10,994.5	89.65	60.55	10,701.0	295.0	434.0	452.5	0.00	0.00	0.00
Start DLS 2.00 TFO 90.10 7" CSG PT - 7"									
11,000.0	89.65	60.66	10,701.0	297.7	438.8	457.4	1.99	0.00	1.99
11,100.0	89.65	62.66	10,701.6	345.1	526.8	548.4	2.00	0.00	2.00
11,200.0	89.64	64.66	10,702.3	389.5	616.4	640.7	2.00	0.00	2.00
11,300.0	89.64	66.66	10,702.9	430.7	707.5	734.3	2.00	0.00	2.00
11,400.0	89.64	68.66	10,703.5	468.7	800.0	829.1	2.00	0.00	2.00
11,500.0	89.64	70.66	10,704.1	503.5	893.8	925.0	2.00	0.00	2.00
11,600.0	89.64	72.66	10,704.8	534.9	988.7	1,021.8	2.00	0.00	2.00
11,700.0	89.64	74.66	10,705.4	563.0	1,084.6	1,119.4	2.00	0.00	2.00
11,800.0	89.64	76.66	10,706.1	587.8	1,181.5	1,217.7	2.00	0.00	2.00
11,900.0	89.64	78.66	10,706.7	609.2	1,279.2	1,316.6	2.00	0.00	2.00
12,000.0	89.64	80.66	10,707.3	627.1	1,377.6	1,415.9	2.00	0.00	2.00
12,100.0	89.64	82.66	10,708.0	641.6	1,476.5	1,515.6	2.00	0.00	2.00
12,200.0	89.64	84.66	10,708.6	652.6	1,575.9	1,615.5	2.00	0.00	2.00
12,300.0	89.64	86.66	10,709.2	660.2	1,675.6	1,715.4	2.00	0.00	2.00
12,400.0	89.64	88.66	10,709.8	664.3	1,775.5	1,815.4	2.00	0.00	2.00
12,466.8	89.65	90.00	10,710.2	665.0	1,842.3	1,882.1	2.00	0.00	2.00
Start 8281.9 hold at 12466.8 MD									
12,500.0	89.65	90.00	10,710.5	665.0	1,875.5	1,915.2	0.00	0.00	0.00
12,600.0	89.65	90.00	10,711.1	665.0	1,975.5	2,015.0	0.00	0.00	0.00
12,700.0	89.65	90.00	10,711.7	665.0	2,075.5	2,114.8	0.00	0.00	0.00
12,800.0	89.65	90.00	10,712.3	665.0	2,175.5	2,214.6	0.00	0.00	0.00
12,900.0	89.65	90.00	10,712.9	665.0	2,275.5	2,314.4	0.00	0.00	0.00
13,000.0	89.65	90.00	10,713.5	665.0	2,375.5	2,414.1	0.00	0.00	0.00
13,100.0	89.65	90.00	10,714.2	665.0	2,475.5	2,513.9	0.00	0.00	0.00
13,200.0	89.65	90.00	10,714.8	665.0	2,575.5	2,613.7	0.00	0.00	0.00
13,300.0	89.65	90.00	10,715.4	665.0	2,675.5	2,713.5	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	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)
13,400.0	89.65	90.00	10,716.0	665.0	2,775.5	2,813.3	0.00	0.00	0.00
13,500.0	89.65	90.00	10,716.6	665.0	2,875.5	2,913.0	0.00	0.00	0.00
13,600.0	89.65	90.00	10,717.2	665.0	2,975.5	3,012.8	0.00	0.00	0.00
13,700.0	89.65	90.00	10,717.9	665.0	3,075.5	3,112.6	0.00	0.00	0.00
13,800.0	89.65	90.00	10,718.5	665.0	3,175.5	3,212.4	0.00	0.00	0.00
13,900.0	89.65	90.00	10,719.1	665.0	3,275.5	3,312.2	0.00	0.00	0.00
14,000.0	89.65	90.00	10,719.7	665.0	3,375.5	3,411.9	0.00	0.00	0.00
14,100.0	89.65	90.00	10,720.3	665.0	3,475.5	3,511.7	0.00	0.00	0.00
14,200.0	89.65	90.00	10,721.0	665.0	3,575.5	3,611.5	0.00	0.00	0.00
14,300.0	89.65	90.00	10,721.6	665.0	3,675.5	3,711.3	0.00	0.00	0.00
14,400.0	89.65	90.00	10,722.2	665.0	3,775.4	3,811.1	0.00	0.00	0.00
14,500.0	89.65	90.00	10,722.8	665.0	3,875.4	3,910.9	0.00	0.00	0.00
14,600.0	89.65	90.00	10,723.4	665.0	3,975.4	4,010.6	0.00	0.00	0.00
14,700.0	89.65	90.00	10,724.0	665.0	4,075.4	4,110.4	0.00	0.00	0.00
14,800.0	89.65	90.00	10,724.7	665.0	4,175.4	4,210.2	0.00	0.00	0.00
14,900.0	89.65	90.00	10,725.3	665.0	4,275.4	4,310.0	0.00	0.00	0.00
15,000.0	89.65	90.00	10,725.9	665.0	4,375.4	4,409.8	0.00	0.00	0.00
15,100.0	89.65	90.00	10,726.5	665.0	4,475.4	4,509.5	0.00	0.00	0.00
15,200.0	89.65	90.00	10,727.1	665.0	4,575.4	4,609.3	0.00	0.00	0.00
15,300.0	89.65	90.00	10,727.8	665.0	4,675.4	4,709.1	0.00	0.00	0.00
15,400.0	89.65	90.00	10,728.4	665.0	4,775.4	4,808.9	0.00	0.00	0.00
15,500.0	89.65	90.00	10,729.0	665.0	4,875.4	4,908.7	0.00	0.00	0.00
15,600.0	89.65	90.00	10,729.6	665.0	4,975.4	5,008.4	0.00	0.00	0.00
15,700.0	89.65	90.00	10,730.2	665.0	5,075.4	5,108.2	0.00	0.00	0.00
15,800.0	89.65	90.00	10,730.8	665.0	5,175.4	5,208.0	0.00	0.00	0.00
15,900.0	89.65	90.00	10,731.5	665.0	5,275.4	5,307.8	0.00	0.00	0.00
16,000.0	89.65	90.00	10,732.1	665.0	5,375.4	5,407.6	0.00	0.00	0.00
16,100.0	89.65	90.00	10,732.7	665.0	5,475.4	5,507.3	0.00	0.00	0.00
16,200.0	89.65	90.00	10,733.3	665.0	5,575.4	5,607.1	0.00	0.00	0.00
16,300.0	89.65	90.00	10,733.9	665.0	5,675.4	5,706.9	0.00	0.00	0.00
16,400.0	89.65	90.00	10,734.5	665.0	5,775.4	5,806.7	0.00	0.00	0.00
16,500.0	89.65	90.00	10,735.2	665.0	5,875.4	5,906.5	0.00	0.00	0.00
16,600.0	89.65	90.00	10,735.8	665.0	5,975.4	6,006.2	0.00	0.00	0.00
16,700.0	89.65	90.00	10,736.4	665.0	6,075.4	6,106.0	0.00	0.00	0.00
16,800.0	89.65	90.00	10,737.0	665.0	6,175.4	6,205.8	0.00	0.00	0.00
16,900.0	89.65	90.00	10,737.6	665.0	6,275.4	6,305.6	0.00	0.00	0.00
17,000.0	89.65	90.00	10,738.3	665.0	6,375.4	6,405.4	0.00	0.00	0.00
17,100.0	89.65	90.00	10,738.9	665.0	6,475.4	6,505.1	0.00	0.00	0.00
17,200.0	89.65	90.00	10,739.5	665.0	6,575.4	6,604.9	0.00	0.00	0.00
17,300.0	89.65	90.00	10,740.1	665.0	6,675.4	6,704.7	0.00	0.00	0.00
17,400.0	89.65	90.00	10,740.7	665.0	6,775.4	6,804.5	0.00	0.00	0.00
17,500.0	89.65	90.00	10,741.3	665.0	6,875.4	6,904.3	0.00	0.00	0.00
17,600.0	89.65	90.00	10,742.0	665.0	6,975.4	7,004.1	0.00	0.00	0.00
17,700.0	89.65	90.00	10,742.6	665.0	7,075.4	7,103.8	0.00	0.00	0.00
17,800.0	89.65	90.00	10,743.2	665.0	7,175.4	7,203.6	0.00	0.00	0.00
17,900.0	89.65	90.00	10,743.8	665.0	7,275.4	7,303.4	0.00	0.00	0.00
18,000.0	89.65	90.00	10,744.4	665.0	7,375.4	7,403.2	0.00	0.00	0.00
18,100.0	89.65	90.00	10,745.0	665.0	7,475.4	7,503.0	0.00	0.00	0.00
18,200.0	89.65	90.00	10,745.7	665.0	7,575.4	7,602.7	0.00	0.00	0.00
18,300.0	89.65	90.00	10,746.3	665.0	7,675.4	7,702.5	0.00	0.00	0.00
18,400.0	89.65	90.00	10,746.9	665.0	7,775.4	7,802.3	0.00	0.00	0.00
18,500.0	89.65	90.00	10,747.5	665.0	7,875.4	7,902.1	0.00	0.00	0.00
18,600.0	89.65	90.00	10,748.1	665.0	7,975.4	8,001.9	0.00	0.00	0.00
18,700.0	89.65	90.00	10,748.8	665.0	8,075.4	8,101.6	0.00	0.00	0.00
18,800.0	89.65	90.00	10,749.4	665.0	8,175.4	8,201.4	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database: OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company: Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project: Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site: 153N-100W-29/30	North Reference:	True
Well: Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore: Wade Federal 5300 31-30 2B		
Design: 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)
18,900.0	89.65	90.00	10,750.0	665.0	8,275.4	8,301.2	0.00	0.00	0.00
19,000.0	89.65	90.00	10,750.6	665.0	8,375.4	8,401.0	0.00	0.00	0.00
19,100.0	89.65	90.00	10,751.2	665.0	8,475.4	8,500.8	0.00	0.00	0.00
19,200.0	89.65	90.00	10,751.8	665.0	8,575.4	8,600.5	0.00	0.00	0.00
19,300.0	89.65	90.00	10,752.5	665.0	8,675.4	8,700.3	0.00	0.00	0.00
19,400.0	89.65	90.00	10,753.1	665.0	8,775.4	8,800.1	0.00	0.00	0.00
19,500.0	89.65	90.00	10,753.7	665.0	8,875.4	8,899.9	0.00	0.00	0.00
19,600.0	89.65	90.00	10,754.3	665.0	8,975.3	8,999.7	0.00	0.00	0.00
19,700.0	89.65	90.00	10,754.9	665.0	9,075.3	9,099.4	0.00	0.00	0.00
19,800.0	89.65	90.00	10,755.5	665.0	9,175.3	9,199.2	0.00	0.00	0.00
19,900.0	89.65	90.00	10,756.2	665.0	9,275.3	9,299.0	0.00	0.00	0.00
20,000.0	89.65	90.00	10,756.8	665.0	9,375.3	9,398.8	0.00	0.00	0.00
20,100.0	89.65	90.00	10,757.4	665.0	9,475.3	9,498.6	0.00	0.00	0.00
20,200.0	89.65	90.00	10,758.0	665.0	9,575.3	9,598.4	0.00	0.00	0.00
20,300.0	89.65	90.00	10,758.6	665.0	9,675.3	9,698.1	0.00	0.00	0.00
20,400.0	89.65	90.00	10,759.3	665.0	9,775.3	9,797.9	0.00	0.00	0.00
20,500.0	89.65	90.00	10,759.9	665.0	9,875.3	9,897.7	0.00	0.00	0.00
20,600.0	89.65	90.00	10,760.5	665.0	9,975.3	9,997.5	0.00	0.00	0.00
20,693.9	89.65	90.00	10,761.1	665.0	10,069.2	10,091.1	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL	0.00	0.00	10,761.4	677.5	10,068.4	395,812.98	1,219,709.96	48° 2' 39.440 N	103° 33' 43.230 W
- plan misses target center by 12.5ft at 20693.0ft MD (10761.1 TVD, 665.0 N, 10068.4 E)									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,100.0	2,100.0 9 5/8"		9.625	13.500
10,994.5	10,701.0 7"		7.000	8.750

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 31-30 2B		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,920.0	1,920.0	Pierre			
4,566.1	4,566.0	Greenhorn			
4,969.1	4,969.0	Mowry			
5,391.1	5,391.0	Dakota			
6,407.2	6,407.0	Rierdon			
6,896.2	6,896.0	Dunham Salt			
6,942.2	6,942.0	Dunham Salt Base			
7,205.2	7,205.0	Pine Salt			
7,229.2	7,229.0	Pine Salt Base			
7,291.2	7,291.0	Opeche Salt			
7,371.2	7,371.0	Opeche Salt Base			
7,615.2	7,615.0	Amsden			
7,771.2	7,771.0	Tyler			
7,994.2	7,994.0	Otter/Base Minnelusa			
8,336.2	8,336.0	Kibbey Lime			
8,484.2	8,484.0	Charles Salt			
9,163.2	9,163.0	Base Last Salt			
9,377.2	9,377.0	Mission Canyon			
9,926.2	9,926.0	Lodgepole			
10,765.0	10,656.0	False Bakken			
10,795.4	10,668.0	Upper Bakken Shale			
10,898.7	10,695.0	Middle Bakken (Top of Target)			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			Comment
		+N/-S (ft)	+E/-W (ft)		
2,100.0	2,100.0	0.0	0.0	Start Build 5.00	
2,110.0	2,110.0	0.0	0.0	Start 5719.7 hold at 2110.0 MD	
7,829.7	7,829.4	50.0	0.0	Start Drop -5.00	
7,839.7	7,839.4	50.0	0.0	Start 2160.6 hold at 7839.7 MD	
10,000.2	10,000.0	50.0	0.0	Start 223.4 hold at 10000.2 MD	
10,223.6	10,223.4	50.0	0.0	Start Build 12.00 KOP	
10,970.7	10,700.9	283.3	413.2	Start 23.8 hold at 10970.7 MD EOC	
10,994.5	10,701.0	295.0	434.0	Start DLS 2.00 TFO 90.10 7" CSG PT	
12,466.8	10,710.2	665.0	1,842.3	Start 8281.9 hold at 12466.8 MD	
20,748.7				TD at 20748.7 PBHL	

Oasis

Indian Hills

153N-100W-29/30

Wade Federal 5300 31-30 2B

Wade Federal 5300 31-30 2B

Plan #1

Anticollision Report

29 January, 2014

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 10,000.0 ft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool Program		Date	1/29/2014	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	20,755.9	Plan #1 (Wade Federal 5300 31-30 2B)		MWD
				MWD - Standard

Summary								
Site Name	Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance			Separation Factor	Warning
153N-100W-29/30				Between Centres (ft)	Between Ellipses (ft)			
153N-100W-29/30	Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-	2,100.0	2,100.0	32.4	23.3	3.540 CC		
	Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-	20,755.9	20,836.4	103.4	-48.9	0.679 Level 1, ES, SF		

Offset Design 153N-100W-29/30 - Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-30 3T2 - Plan #1											Offset Site Error:	0.0 ft			
Survey Program:		Offset Wellbore Centre									Distance			Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/S (ft)	+E/W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-32.4	0.0	32.4						
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-32.4	0.0	32.4	32.3	0.17	192.346			
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-32.4	0.0	32.4	31.8	0.62	52.458			
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-32.4	0.0	32.4	31.4	1.07	30.370			
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-32.4	0.0	32.4	30.9	1.52	21.372			
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-32.4	0.0	32.4	30.5	1.97	16.487			
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-32.4	0.0	32.4	30.0	2.42	13.419			
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-32.4	0.0	32.4	29.6	2.87	11.314			
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-32.4	0.0	32.4	29.1	3.32	9.780			
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-32.4	0.0	32.4	28.7	3.76	8.613			
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-32.4	0.0	32.4	28.2	4.21	7.694			
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	180.00	-32.4	0.0	32.4	27.8	4.66	6.952			
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	180.00	-32.4	0.0	32.4	27.3	5.11	6.341			
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	180.00	-32.4	0.0	32.4	26.9	5.56	5.829			
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	180.00	-32.4	0.0	32.4	26.4	6.01	5.393			
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	180.00	-32.4	0.0	32.4	26.0	6.46	5.018			
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	180.00	-32.4	0.0	32.4	25.5	6.91	4.691			
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	180.00	-32.4	0.0	32.4	25.1	7.36	4.405			
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	180.00	-32.4	0.0	32.4	24.6	7.81	4.151			
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	180.00	-32.4	0.0	32.4	24.2	8.26	3.925			
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	180.00	-32.4	0.0	32.4	23.7	8.71	3.723			
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	180.00	-32.4	0.0	32.4	23.3	9.16	3.540 CC			
2,110.0	2,110.0	2,110.1	2,110.1	4.6	4.6	179.93	-32.4	0.0	32.4	23.2	9.20	3.525			
2,200.0	2,200.0	2,200.1	2,200.1	4.8	4.8	178.75	-32.0	0.7	32.8	23.2	9.60	3.423			
2,300.0	2,300.0	2,300.1	2,300.1	5.0	5.0	177.47	-31.6	1.5	33.3	23.3	10.03	3.319			
2,400.0	2,400.0	2,400.1	2,400.1	5.3	5.2	176.22	-31.1	2.2	33.8	23.3	10.47	3.226			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 153N-100W-29/30 - Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-30 3T2 - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference			Offset		Semi Major Axis			Distance					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
2,500.0	2,500.0	2,500.1	2,500.1	5.5	5.4	175.01	-30.7	3.0	34.3	23.4	10.91	3.141	
2,600.0	2,600.0	2,600.1	2,600.1	5.7	5.6	173.83	-30.3	3.7	34.8	23.4	11.35	3.064	
2,700.0	2,700.0	2,700.1	2,700.1	5.9	5.9	172.69	-29.8	4.5	35.3	23.5	11.79	2.993	
2,800.0	2,800.0	2,800.1	2,800.1	6.2	6.1	171.58	-29.4	5.2	35.8	23.6	12.23	2.929	
2,900.0	2,900.0	2,900.1	2,900.1	6.4	6.3	170.51	-28.9	6.0	36.4	23.7	12.67	2.870	
3,000.0	3,000.0	3,000.1	3,000.1	6.6	6.5	169.46	-28.5	6.8	36.9	23.8	13.12	2.816	
3,100.0	3,100.0	3,100.1	3,100.1	6.8	6.7	168.45	-28.1	7.5	37.5	23.9	13.56	2.766	
3,200.0	3,200.0	3,200.1	3,200.1	7.1	7.0	167.47	-27.6	8.3	38.1	24.1	14.00	2.720	
3,300.0	3,300.0	3,300.1	3,300.1	7.3	7.2	166.52	-27.2	9.0	38.7	24.2	14.45	2.677	
3,400.0	3,400.0	3,400.1	3,400.0	7.5	7.4	165.60	-26.7	9.8	39.3	24.4	14.89	2.638	
3,500.0	3,499.9	3,500.1	3,500.0	7.7	7.6	164.70	-26.3	10.5	39.9	24.6	15.33	2.601	
3,600.0	3,599.9	3,600.1	3,600.0	8.0	7.8	163.84	-25.9	11.3	40.5	24.7	15.78	2.568	
3,700.0	3,699.9	3,700.1	3,700.0	8.2	8.1	162.99	-25.4	12.0	41.1	24.9	16.22	2.536	
3,800.0	3,799.9	3,800.1	3,800.0	8.4	8.3	162.18	-25.0	12.8	41.8	25.1	16.67	2.507	
3,900.0	3,899.9	3,900.1	3,900.0	8.6	8.5	161.39	-24.6	13.5	42.4	25.3	17.11	2.479	
4,000.0	3,999.9	4,000.1	4,000.0	8.9	8.7	160.62	-24.1	14.3	43.1	25.5	17.56	2.454	
4,100.0	4,099.9	4,100.1	4,100.0	9.1	8.9	159.88	-23.7	15.1	43.8	25.7	18.01	2.430	
4,200.0	4,199.9	4,200.1	4,200.0	9.3	9.2	159.16	-23.2	15.8	44.4	26.0	18.45	2.408	
4,300.0	4,299.9	4,300.1	4,300.0	9.5	9.4	158.46	-22.8	16.6	45.1	26.2	18.90	2.387	
4,400.0	4,399.9	4,400.1	4,400.0	9.8	9.6	157.78	-22.4	17.3	45.8	26.4	19.34	2.367	
4,500.0	4,499.9	4,500.1	4,500.0	10.0	9.8	157.12	-21.9	18.1	46.5	26.7	19.79	2.348	
4,600.0	4,599.9	4,600.0	4,600.0	10.2	10.0	156.48	-21.5	18.8	47.2	26.9	20.24	2.331	
4,700.0	4,699.9	4,700.0	4,699.9	10.4	10.3	155.86	-21.0	19.6	47.9	27.2	20.68	2.315	
4,800.0	4,799.9	4,800.0	4,799.9	10.6	10.5	155.26	-20.6	20.3	48.6	27.5	21.13	2.299	
4,900.0	4,899.9	4,900.0	4,899.9	10.9	10.7	154.67	-20.2	21.1	49.3	27.7	21.58	2.285	
5,000.0	4,999.9	5,000.0	4,999.9	11.1	10.9	154.10	-19.7	21.8	50.0	28.0	22.02	2.271	
5,100.0	5,099.9	5,100.0	5,099.9	11.3	11.2	153.55	-19.3	22.6	50.7	28.3	22.47	2.258	
5,200.0	5,199.9	5,200.0	5,199.9	11.5	11.4	153.02	-18.8	23.3	51.5	28.5	22.92	2.245	
5,300.0	5,299.9	5,300.0	5,299.9	11.8	11.6	152.49	-18.4	24.1	52.2	28.8	23.36	2.234	
5,400.0	5,399.9	5,400.0	5,399.9	12.0	11.8	151.99	-18.0	24.9	52.9	29.1	23.81	2.223	
5,500.0	5,499.9	5,500.0	5,499.9	12.2	12.0	151.49	-17.5	25.6	53.7	29.4	24.26	2.212	
5,600.0	5,599.9	5,600.0	5,599.9	12.4	12.3	151.01	-17.1	26.4	54.4	29.7	24.71	2.202	
5,700.0	5,699.9	5,700.0	5,699.9	12.7	12.5	150.55	-16.7	27.1	55.2	30.0	25.15	2.193	
5,800.0	5,799.9	5,800.0	5,799.9	12.9	12.7	150.09	-16.2	27.9	55.9	30.3	25.60	2.184	
5,900.0	5,899.9	5,900.0	5,899.9	13.1	12.9	149.65	-15.8	28.6	56.7	30.6	26.05	2.175	
6,000.0	5,999.9	6,000.0	5,999.8	13.3	13.2	149.22	-15.3	29.4	57.4	30.9	26.50	2.167	
6,100.0	6,099.8	6,100.0	6,099.8	13.6	13.4	148.80	-14.9	30.1	58.2	31.2	26.94	2.159	
6,200.0	6,199.8	6,200.0	6,199.8	13.8	13.6	148.39	-14.5	30.9	58.9	31.6	27.39	2.152	
6,300.0	6,299.8	6,300.0	6,299.8	14.0	13.8	147.99	-14.0	31.6	59.7	31.9	27.84	2.145	
6,400.0	6,399.8	6,400.0	6,399.8	14.2	14.1	147.60	-13.6	32.4	60.5	32.2	28.29	2.138	
6,500.0	6,499.8	6,500.0	6,499.8	14.5	14.3	147.23	-13.1	33.2	61.3	32.5	28.74	2.132	
6,600.0	6,599.8	6,600.0	6,599.8	14.7	14.5	146.86	-12.7	33.9	62.0	32.8	29.18	2.125	
6,700.0	6,699.8	6,700.0	6,699.8	14.9	14.7	146.50	-12.3	34.7	62.8	33.2	29.63	2.119	
6,800.0	6,799.8	6,800.0	6,799.8	15.1	15.0	146.15	-11.8	35.4	63.6	33.5	30.08	2.114	
6,900.0	6,899.8	6,900.0	6,899.8	15.4	15.2	145.80	-11.4	36.2	64.4	33.8	30.53	2.108	
7,000.0	6,999.8	7,000.0	6,999.8	15.6	15.4	145.47	-11.0	36.9	65.1	34.2	30.97	2.103	
7,100.0	7,099.8	7,100.0	7,099.8	15.8	15.6	145.14	-10.5	37.7	65.9	34.5	31.42	2.098	
7,200.0	7,199.8	7,199.9	7,199.8	16.0	15.9	144.82	-10.1	38.4	66.7	34.9	31.87	2.094	
7,300.0	7,299.8	7,299.9	7,299.7	16.3	16.1	144.51	-9.6	39.2	67.5	35.2	32.32	2.089	
7,400.0	7,399.8	7,399.9	7,399.7	16.5	16.3	144.21	-9.2	39.9	68.3	35.5	32.77	2.085	
7,500.0	7,499.8	7,499.9	7,499.7	16.7	16.5	143.91	-8.8	40.7	69.1	35.9	33.22	2.080	
7,600.0	7,599.8	7,599.9	7,599.7	16.9	16.7	143.62	-8.3	41.5	69.9	36.2	33.66	2.076	
7,700.0	7,699.8	7,699.9	7,699.7	17.2	17.0	143.34	-7.9	42.2	70.7	36.6	34.11	2.072	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 153N-100W-29/30 - Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-30 3T2 - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference			Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/S (ft)	Centre +E/W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,800.0	7,799.8	7,799.9	7,799.7	17.4	17.2	143.06	-7.4	43.0	71.5	36.9	34.56	2.069		
7,829.7	7,829.4	7,829.6	7,829.4	17.5	17.3	143.15	-7.4	43.0	71.7	37.0	34.69	2.067		
7,839.7	7,839.4	7,839.6	7,839.4	17.5	17.3	143.17	-7.4	43.0	71.7	37.0	34.70	2.068		
7,900.0	7,899.8	7,900.0	7,899.8	17.6	17.4	143.17	-7.4	43.0	71.7	36.8	34.94	2.053		
8,000.0	7,999.8	8,000.0	7,999.8	17.8	17.6	143.17	-7.4	43.0	71.7	36.4	35.38	2.028		
8,100.0	8,099.8	8,100.0	8,099.8	18.0	17.8	143.17	-7.4	43.0	71.7	35.9	35.82	2.003		
8,200.0	8,199.8	8,200.0	8,199.8	18.3	18.0	143.17	-7.4	43.0	71.7	35.5	36.26	1.978		
8,300.0	8,299.8	8,300.0	8,299.8	18.5	18.3	143.17	-7.4	43.0	71.7	35.0	36.70	1.955		
8,400.0	8,399.8	8,400.0	8,399.8	18.7	18.5	143.17	-7.4	43.0	71.7	34.6	37.14	1.931		
8,500.0	8,499.8	8,500.0	8,499.8	18.9	18.7	143.17	-7.4	43.0	71.7	34.2	37.59	1.909		
8,600.0	8,599.8	8,600.0	8,599.8	19.2	18.9	143.17	-7.4	43.0	71.7	33.7	38.03	1.887		
8,700.0	8,699.8	8,700.0	8,699.8	19.4	19.1	143.17	-7.4	43.0	71.7	33.3	38.47	1.865		
8,800.0	8,799.8	8,800.0	8,799.8	19.6	19.4	143.17	-7.4	43.0	71.7	32.8	38.91	1.844		
8,900.0	8,899.8	8,900.0	8,899.8	19.8	19.6	143.17	-7.4	43.0	71.7	32.4	39.36	1.823		
9,000.0	8,999.8	9,000.0	8,999.8	20.1	19.8	143.17	-7.4	43.0	71.7	31.9	39.80	1.803		
9,100.0	9,099.8	9,100.0	9,099.8	20.3	20.0	143.17	-7.4	43.0	71.7	31.5	40.24	1.783		
9,200.0	9,199.8	9,200.0	9,199.8	20.5	20.2	143.17	-7.4	43.0	71.7	31.1	40.69	1.763		
9,300.0	9,299.8	9,300.0	9,299.8	20.7	20.4	143.17	-7.4	43.0	71.7	30.6	41.13	1.744		
9,400.0	9,399.8	9,400.0	9,399.8	21.0	20.7	143.17	-7.4	43.0	71.7	30.2	41.57	1.726		
9,500.0	9,499.8	9,500.0	9,499.8	21.2	20.9	143.17	-7.4	43.0	71.7	29.7	42.02	1.707		
9,600.0	9,599.8	9,600.0	9,599.8	21.4	21.1	143.17	-7.4	43.0	71.7	29.3	42.46	1.690		
9,700.0	9,699.8	9,700.0	9,699.8	21.6	21.3	143.17	-7.4	43.0	71.7	28.8	42.90	1.672		
9,800.0	9,799.8	9,800.0	9,799.8	21.9	21.5	143.17	-7.4	43.0	71.7	28.4	43.35	1.655		
9,900.0	9,899.8	9,900.0	9,899.8	22.1	21.8	143.17	-7.4	43.0	71.7	27.9	43.79	1.638		
10,000.2	10,000.0	10,000.2	10,000.0	22.3	22.0	143.17	-7.4	43.0	71.7	27.5	44.24	1.622		
10,100.0	10,099.8	10,100.0	10,099.8	22.5	22.2	143.17	-7.4	43.0	71.7	27.1	44.68	1.606		
10,200.0	10,199.8	10,200.0	10,199.8	22.8	22.4	143.17	-7.4	43.0	71.7	26.6	45.12	1.590		
10,223.7	10,223.5	10,223.7	10,223.5	22.8	22.5	143.17	-7.4	43.0	71.7	26.5	45.23	1.586		
10,225.0	10,224.8	10,225.0	10,224.8	22.8	22.5	83.44	-7.4	43.0	71.7	26.5	45.27	1.585		
10,250.0	10,249.8	10,250.0	10,249.8	22.9	22.5	84.02	-7.4	43.0	71.7	26.3	45.38	1.579		
10,275.0	10,274.7	10,274.9	10,274.7	22.9	22.6	85.66	-7.4	43.0	71.5	26.0	45.49	1.571		
10,300.0	10,299.5	10,299.7	10,299.5	23.0	22.6	88.32	-7.4	43.0	71.3	25.7	45.60	1.564		
10,312.3	10,311.6	10,311.8	10,311.6	23.0	22.7	90.00	-7.4	43.0	71.3	25.6	45.66	1.561		
10,325.0	10,324.0	10,324.2	10,324.0	23.0	22.7	91.97	-7.4	43.0	71.3	25.6	45.71	1.560		
10,350.0	10,348.3	10,349.0	10,348.8	23.1	22.8	96.23	-7.2	43.4	71.7	25.9	45.82	1.565		
10,375.0	10,372.3	10,374.1	10,373.8	23.2	22.8	100.45	-6.2	44.9	72.5	26.5	45.91	1.578		
10,400.0	10,395.8	10,399.4	10,398.9	23.2	22.9	104.57	-4.6	47.6	73.6	27.6	45.98	1.600		
10,425.0	10,418.9	10,425.1	10,424.2	23.3	22.9	108.55	-2.2	51.4	75.0	29.0	45.99	1.631		
10,450.0	10,441.4	10,451.1	10,449.5	23.3	23.0	112.36	1.0	56.5	76.8	30.8	45.96	1.671		
10,475.0	10,463.3	10,477.4	10,474.8	23.4	23.1	115.98	4.9	62.8	78.8	33.0	45.86	1.719		
10,500.0	10,484.6	10,504.1	10,499.9	23.5	23.1	119.39	9.6	70.3	81.1	35.4	45.69	1.774		
10,525.0	10,505.2	10,531.1	10,524.8	23.6	23.2	122.58	15.2	79.2	83.5	38.1	45.45	1.837		
10,550.0	10,525.0	10,558.4	10,549.3	23.6	23.3	125.56	21.5	89.4	86.1	41.0	45.15	1.907		
10,575.0	10,543.9	10,586.1	10,573.5	23.7	23.3	128.32	28.7	100.9	88.8	44.0	44.79	1.983		
10,600.0	10,562.0	10,614.2	10,597.1	23.8	23.4	130.87	36.7	113.8	91.6	47.2	44.37	2.064		
10,625.0	10,579.2	10,642.6	10,620.0	23.9	23.5	133.23	45.6	127.9	94.4	50.4	43.91	2.149		
10,650.0	10,595.4	10,671.3	10,642.2	24.1	23.6	135.40	55.2	143.5	97.1	53.7	43.41	2.237		
10,675.0	10,610.5	10,700.4	10,663.5	24.2	23.7	137.40	65.7	160.3	99.8	57.0	42.89	2.328		
10,700.0	10,624.6	10,729.8	10,683.7	24.3	23.9	139.23	77.0	178.4	102.5	60.1	42.36	2.420		
10,725.0	10,637.6	10,759.6	10,702.8	24.5	24.0	140.91	89.1	197.8	105.0	63.2	41.82	2.511		
10,750.0	10,649.5	10,789.7	10,720.7	24.7	24.2	142.45	101.9	218.3	107.4	66.1	41.29	2.601		
10,775.0	10,660.2	10,820.1	10,737.1	24.8	24.4	143.86	115.5	240.0	109.6	68.8	40.79	2.687		
10,800.0	10,669.7	10,850.8	10,752.0	25.0	24.6	145.14	129.7	262.7	111.6	71.3	40.32	2.769		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 153N-100W-29/30 - Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-30 3T2 - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference			Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/S (ft)	Centre +E/W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,825.0	10,678.0	10,881.7	10,765.3	25.2	24.8	146.30	144.4	286.5	113.4	73.6	39.89	2.844		
10,850.0	10,685.0	10,912.9	10,776.8	25.5	25.0	147.35	159.8	311.0	115.0	75.5	39.52	2.910		
10,875.0	10,690.8	10,944.3	10,786.4	25.7	25.3	148.29	175.6	336.4	116.3	77.1	39.21	2.966		
10,900.0	10,695.3	10,975.8	10,794.1	26.0	25.6	149.14	191.8	362.3	117.4	78.4	38.98	3.011		
10,925.0	10,698.5	11,007.5	10,799.8	26.2	25.9	149.88	208.3	388.8	118.1	79.3	38.83	3.042		
10,950.0	10,700.4	11,039.4	10,803.4	26.5	26.3	150.54	225.0	415.6	118.6	79.8	38.76	3.059		
10,970.8	10,700.9	11,065.9	10,804.8	26.7	26.6	151.01	239.1	438.1	118.7	79.9	38.78	3.061		
10,981.4	10,701.0	11,078.4	10,804.9	26.8	26.7	151.19	245.7	448.7	118.6	79.8	38.82	3.055		
11,000.0	10,701.1	11,096.9	10,805.0	27.1	26.9	151.44	255.4	464.4	118.3	79.4	38.91	3.041		
11,100.0	10,701.7	11,194.9	10,805.6	28.4	28.2	152.88	305.7	548.6	116.8	77.3	39.41	2.963		
11,200.0	10,702.3	11,293.1	10,806.3	30.0	29.7	154.39	353.1	634.6	115.2	75.3	39.92	2.886		
11,300.0	10,703.0	11,391.4	10,806.9	31.7	31.4	155.97	397.5	722.2	113.8	73.3	40.41	2.815		
11,400.0	10,703.6	11,489.8	10,807.5	33.5	33.2	157.61	439.0	811.5	112.4	71.5	40.85	2.750		
11,500.0	10,704.2	11,588.3	10,808.1	35.5	35.1	159.32	477.4	902.2	111.0	69.8	41.22	2.694		
11,600.0	10,704.9	11,687.0	10,808.7	37.6	37.1	161.09	512.8	994.3	109.8	68.3	41.48	2.647		
11,700.0	10,705.5	11,785.7	10,809.4	39.7	39.2	162.93	544.9	1,087.6	108.6	67.0	41.65	2.608		
11,800.0	10,706.1	11,884.6	10,810.0	41.9	41.4	164.82	573.9	1,182.2	107.6	65.9	41.72	2.579		
11,900.0	10,706.8	11,983.6	10,810.6	44.2	43.7	166.77	599.7	1,277.8	106.7	65.0	41.72	2.557		
12,000.0	10,707.4	12,082.8	10,811.2	46.6	46.0	168.76	622.1	1,374.4	105.9	64.2	41.66	2.541		
12,100.0	10,708.0	12,182.1	10,811.9	49.0	48.4	170.80	641.2	1,471.8	105.2	63.6	41.61	2.528		
12,200.0	10,708.7	12,281.5	10,812.5	51.4	50.8	172.88	656.9	1,569.9	104.6	63.0	41.61	2.515		
12,300.0	10,709.3	12,381.0	10,813.1	53.9	53.2	174.98	669.3	1,668.7	104.2	62.5	41.75	2.497		
12,400.0	10,709.9	12,480.7	10,813.7	56.4	55.7	177.11	678.2	1,768.0	104.0	61.9	42.09	2.470		
12,494.6	10,710.5	12,575.2	10,814.3	58.7	58.1	179.13	683.4	1,862.3	103.8	61.2	42.69	2.433		
12,500.0	10,710.5	12,580.5	10,814.4	58.9	58.2	179.24	683.6	1,867.6	103.8	61.1	42.73	2.430		
12,551.7	10,710.9	12,632.2	10,814.7	60.2	59.5	-179.95	685.1	1,919.3	103.8	60.6	43.19	2.404		
12,600.0	10,711.2	12,680.5	10,815.0	61.4	60.7	-179.67	685.6	1,967.6	103.8	60.2	43.66	2.378		
12,700.0	10,711.8	12,780.5	10,815.6	63.9	63.2	-179.66	685.6	2,067.6	103.8	59.2	44.66	2.325		
12,800.0	10,712.4	12,880.5	10,816.2	66.5	65.8	-179.66	685.6	2,167.6	103.8	58.1	45.68	2.273		
12,900.0	10,713.0	12,980.5	10,816.8	69.1	68.4	-179.66	685.6	2,267.6	103.8	57.1	46.72	2.222		
13,000.0	10,713.6	13,080.5	10,817.4	71.7	71.0	-179.66	685.6	2,367.6	103.8	56.0	47.79	2.172		
13,100.0	10,714.2	13,180.5	10,818.0	74.4	73.6	-179.66	685.6	2,467.6	103.8	54.9	48.87	2.124		
13,200.0	10,714.8	13,280.5	10,818.6	77.1	76.3	-179.66	685.6	2,567.6	103.8	53.8	49.98	2.077		
13,300.0	10,715.5	13,380.5	10,819.3	79.7	79.0	-179.66	685.6	2,667.6	103.8	52.7	51.10	2.031		
13,400.0	10,716.1	13,480.5	10,819.9	82.5	81.7	-179.66	685.6	2,767.6	103.8	51.5	52.25	1.987		
13,500.0	10,716.7	13,580.5	10,820.5	85.2	84.4	-179.66	685.6	2,867.6	103.8	50.4	53.40	1.944		
13,600.0	10,717.3	13,680.5	10,821.1	87.9	87.1	-179.66	685.6	2,967.6	103.8	49.2	54.57	1.902		
13,700.0	10,717.9	13,780.5	10,821.7	90.7	89.8	-179.66	685.6	3,067.6	103.8	48.0	55.76	1.861		
13,800.0	10,718.5	13,880.5	10,822.3	93.4	92.6	-179.66	685.6	3,167.6	103.8	46.8	56.96	1.822		
13,900.0	10,719.2	13,980.5	10,822.9	96.2	95.3	-179.66	685.6	3,267.6	103.8	45.6	58.17	1.784		
14,000.0	10,719.8	14,080.5	10,823.5	99.0	98.1	-179.66	685.6	3,367.6	103.8	44.4	59.39	1.747		
14,100.0	10,720.4	14,180.5	10,824.1	101.7	100.9	-179.66	685.6	3,467.5	103.8	43.1	60.63	1.711		
14,200.0	10,721.0	14,280.5	10,824.7	104.5	103.7	-179.66	685.6	3,567.5	103.8	41.9	61.87	1.677		
14,300.0	10,721.6	14,380.5	10,825.4	107.3	106.4	-179.66	685.6	3,667.5	103.7	40.6	63.12	1.644		
14,400.0	10,722.2	14,480.5	10,826.0	110.2	109.2	-179.66	685.6	3,767.5	103.7	39.4	64.39	1.611		
14,500.0	10,722.8	14,580.5	10,826.6	113.0	112.1	-179.66	685.6	3,867.5	103.7	38.1	65.66	1.580		
14,600.0	10,723.5	14,680.5	10,827.2	115.8	114.9	-179.66	685.6	3,967.5	103.7	36.8	66.94	1.550		
14,700.0	10,724.1	14,780.5	10,827.8	118.6	117.7	-179.66	685.6	4,067.5	103.7	35.5	68.22	1.520		
14,800.0	10,724.7	14,880.5	10,828.4	121.4	120.5	-179.66	685.6	4,167.5	103.7	34.2	69.52	1.492 Level 3Level 3		
14,900.0	10,725.3	14,980.5	10,829.0	124.3	123.3	-179.66	685.6	4,267.5	103.7	32.9	70.82	1.465 Level 3Level 3		
15,000.0	10,725.9	15,080.5	10,829.6	127.1	126.2	-179.66	685.6	4,367.5	103.7	31.6	72.12	1.438 Level 3Level 3		
15,100.0	10,726.5	15,180.5	10,830.2	130.0	129.0	-179.66	685.6	4,467.5	103.7	30.3	73.44	1.412 Level 3Level 3		
15,200.0	10,727.2	15,280.5	10,830.9	132.8	131.9	-179.66	685.6	4,567.5	103.7	28.9	74.76	1.387 Level 3Level 3		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 153N-100W-29/30 - Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-30 3T2 - Plan #1												Offset Site Error:	0.0 ft	
Survey Program: 0-MWD												Offset Well Error:	0.0 ft	
Reference			Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface		Offset Wellbore Centre +N/S (ft)	+E/W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,300.0	10,727.8	15,380.5	10,831.5	135.7	134.7	-179.66		685.6	4,667.5	103.7	27.6	76.08	1.363	Level 3
15,400.0	10,728.4	15,480.5	10,832.1	138.5	137.5	-179.66		685.6	4,767.5	103.7	26.3	77.41	1.340	Level 3
15,500.0	10,729.0	15,580.5	10,832.7	141.4	140.4	-179.66		685.6	4,867.5	103.7	24.9	78.74	1.317	Level 3
15,600.0	10,729.6	15,680.5	10,833.3	144.2	143.3	-179.66		685.6	4,967.5	103.7	23.6	80.08	1.295	Level 3
15,700.0	10,730.2	15,780.5	10,833.9	147.1	146.1	-179.66		685.6	5,067.5	103.7	22.3	81.42	1.273	Level 3
15,800.0	10,730.8	15,880.5	10,834.5	150.0	149.0	-179.66		685.6	5,167.5	103.7	20.9	82.77	1.253	Level 3
15,900.0	10,731.5	15,980.5	10,835.1	152.8	151.8	-179.66		685.6	5,267.5	103.7	19.5	84.12	1.232	Level 2
16,000.0	10,732.1	16,080.5	10,835.7	155.7	154.7	-179.66		685.6	5,367.5	103.7	18.2	85.48	1.213	Level 2
16,100.0	10,732.7	16,180.5	10,836.4	158.6	157.6	-179.66		685.6	5,467.5	103.7	16.8	86.84	1.194	Level 2
16,200.0	10,733.3	16,280.5	10,837.0	161.4	160.4	-179.66		685.6	5,567.5	103.7	15.5	88.20	1.175	Level 2
16,300.0	10,733.9	16,380.5	10,837.6	164.3	163.3	-179.66		685.6	5,667.5	103.7	14.1	89.57	1.157	Level 2
16,400.0	10,734.5	16,480.5	10,838.2	167.2	166.2	-179.66		685.6	5,767.5	103.6	12.7	90.93	1.140	Level 2
16,500.0	10,735.2	16,580.5	10,838.8	170.1	169.1	-179.66		685.6	5,867.5	103.6	11.3	92.31	1.123	Level 2
16,600.0	10,735.8	16,680.5	10,839.4	173.0	172.0	-179.66		685.6	5,967.5	103.6	10.0	93.68	1.106	Level 2
16,700.0	10,736.4	16,780.5	10,840.0	175.8	174.8	-179.66		685.6	6,067.5	103.6	8.6	95.06	1.090	Level 2
16,800.0	10,737.0	16,880.5	10,840.6	178.7	177.7	-179.66		685.6	6,167.5	103.6	7.2	96.44	1.075	Level 2
16,900.0	10,737.6	16,980.5	10,841.2	181.6	180.6	-179.66		685.6	6,267.5	103.6	5.8	97.82	1.059	Level 2
17,000.0	10,738.2	17,080.5	10,841.8	184.5	183.5	-179.66		685.6	6,367.5	103.6	4.4	99.20	1.044	Level 2
17,100.0	10,738.9	17,180.5	10,842.5	187.4	186.4	-179.66		685.6	6,467.5	103.6	3.0	100.59	1.030	Level 2
17,200.0	10,739.5	17,280.5	10,843.1	190.3	189.3	-179.66		685.6	6,567.5	103.6	1.6	101.98	1.016	Level 2
17,300.0	10,740.1	17,380.5	10,843.7	193.2	192.1	-179.66		685.6	6,667.5	103.6	0.2	103.37	1.002	Level 2
17,400.0	10,740.7	17,480.5	10,844.3	196.1	195.0	-179.66		685.6	6,767.5	103.6	-1.2	104.77	0.989	Level 1
17,500.0	10,741.3	17,580.5	10,844.9	199.0	197.9	-179.66		685.6	6,867.5	103.6	-2.6	106.16	0.976	Level 1
17,600.0	10,741.9	17,680.5	10,845.5	201.8	200.8	-179.66		685.6	6,967.5	103.6	-4.0	107.56	0.963	Level 1
17,700.0	10,742.5	17,780.5	10,846.1	204.7	203.7	-179.66		685.6	7,067.5	103.6	-5.4	108.96	0.951	Level 1
17,800.0	10,743.2	17,880.5	10,846.7	207.6	206.6	-179.66		685.6	7,167.5	103.6	-6.8	110.36	0.939	Level 1
17,900.0	10,743.8	17,980.5	10,847.3	210.5	209.5	-179.66		685.6	7,267.5	103.6	-8.2	111.76	0.927	Level 1
18,000.0	10,744.4	18,080.5	10,848.0	213.4	212.4	-179.66		685.6	7,367.5	103.6	-9.6	113.17	0.915	Level 1
18,100.0	10,745.0	18,180.5	10,848.6	216.3	215.3	-179.66		685.6	7,467.5	103.6	-11.0	114.57	0.904	Level 1
18,200.0	10,745.6	18,280.5	10,849.2	219.2	218.2	-179.66		685.6	7,567.5	103.6	-12.4	115.98	0.893	Level 1
18,300.0	10,746.2	18,380.5	10,849.8	222.1	221.1	-179.66		685.6	7,667.5	103.6	-13.8	117.39	0.882	Level 1
18,400.0	10,746.9	18,480.5	10,850.4	225.0	224.0	-179.66		685.6	7,767.5	103.5	-15.3	118.80	0.872	Level 1
18,500.0	10,747.5	18,580.5	10,851.0	227.9	226.9	-179.66		685.6	7,867.5	103.5	-16.7	120.21	0.861	Level 1
18,600.0	10,748.1	18,680.5	10,851.6	230.8	229.8	-179.66		685.6	7,967.5	103.5	-18.1	121.63	0.851	Level 1
18,700.0	10,748.7	18,780.5	10,852.2	233.7	232.7	-179.66		685.6	8,067.5	103.5	-19.5	123.04	0.841	Level 1
18,800.0	10,749.3	18,880.5	10,852.8	236.6	235.6	-179.66		685.6	8,167.5	103.5	-20.9	124.45	0.832	Level 1
18,900.0	10,749.9	18,980.5	10,853.5	239.6	238.5	-179.66		685.6	8,267.5	103.5	-22.3	125.87	0.822	Level 1
19,000.0	10,750.5	19,080.5	10,854.1	242.5	241.4	-179.66		685.6	8,367.5	103.5	-23.8	127.29	0.813	Level 1
19,100.0	10,751.2	19,180.5	10,854.7	245.4	244.3	-179.66		685.6	8,467.5	103.5	-25.2	128.71	0.804	Level 1
19,200.0	10,751.8	19,280.5	10,855.3	248.3	247.2	-179.66		685.6	8,567.5	103.5	-26.6	130.13	0.795	Level 1
19,300.0	10,752.4	19,380.5	10,855.9	251.2	250.1	-179.66		685.6	8,667.5	103.5	-28.0	131.55	0.787	Level 1
19,400.0	10,753.0	19,480.5	10,856.5	254.1	253.0	-179.66		685.6	8,767.4	103.5	-29.5	132.97	0.778	Level 1
19,500.0	10,753.6	19,580.5	10,857.1	257.0	255.9	-179.66		685.6	8,867.4	103.5	-30.9	134.39	0.770	Level 1
19,600.0	10,754.2	19,680.5	10,857.7	259.9	258.8	-179.66		685.6	8,967.4	103.5	-32.3	135.82	0.762	Level 1
19,700.0	10,754.9	19,780.5	10,858.3	262.8	261.8	-179.66		685.6	9,067.4	103.5	-33.8	137.24	0.754	Level 1
19,800.0	10,755.5	19,880.5	10,858.9	265.7	264.7	-179.66		685.6	9,167.4	103.5	-35.2	138.67	0.746	Level 1
19,900.0	10,756.1	19,980.5	10,859.6	268.6	267.6	-179.66		685.6	9,267.4	103.5	-36.6	140.09	0.739	Level 1
20,000.0	10,756.7	20,080.5	10,860.2	271.5	270.5	-179.66		685.6	9,367.4	103.5	-38.1	141.52	0.731	Level 1
20,100.0	10,757.3	20,180.5	10,860.8	274.5	273.4	-179.66		685.6	9,467.4	103.5	-39.5	142.95	0.724	Level 1
20,200.0	10,757.9	20,280.5	10,861.4	277.4	276.3	-179.66		685.6	9,567.4	103.5	-40.9	144.38	0.717	Level 1
20,300.0	10,758.5	20,380.5	10,862.0	280.3	279.2	-179.66		685.6	9,667.4	103.5	-42.4	145.81	0.710	Level 1
20,400.0	10,759.2	20,480.5	10,862.6	283.2	282.1	-179.66		685.6	9,767.4	103.5	-43.8	147.24	0.703	Level 1
20,500.0	10,759.8	20,580.5	10,863.2	286.1	285.0	-179.66		685.6	9,867.4	103.4	-45.2	148.67	0.696	Level 1

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design 153N-100W-29/30 - Wade Federal 5300 41-30 3T2 - Wade Federal 5300 41-30 3T2 - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/S (ft)	Centre +E/W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
20,600.0	10,760.4	20,680.5	10,863.8	289.0	287.9	-179.66	685.6	9,967.4	103.4	-46.7	150.10	0.689	Level 1	
20,700.0	10,761.0	20,780.5	10,864.4	291.9	290.9	-179.66	685.6	10,067.4	103.4	-48.1	151.53	0.683	Level 1	
20,755.9	10,761.4	20,836.4	10,864.8	293.6	292.5	-179.66	685.6	10,123.4	103.4	-48.9	152.34	0.679	Level 1, ES, SF	

Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 2070.0ft (Original Well Elev)

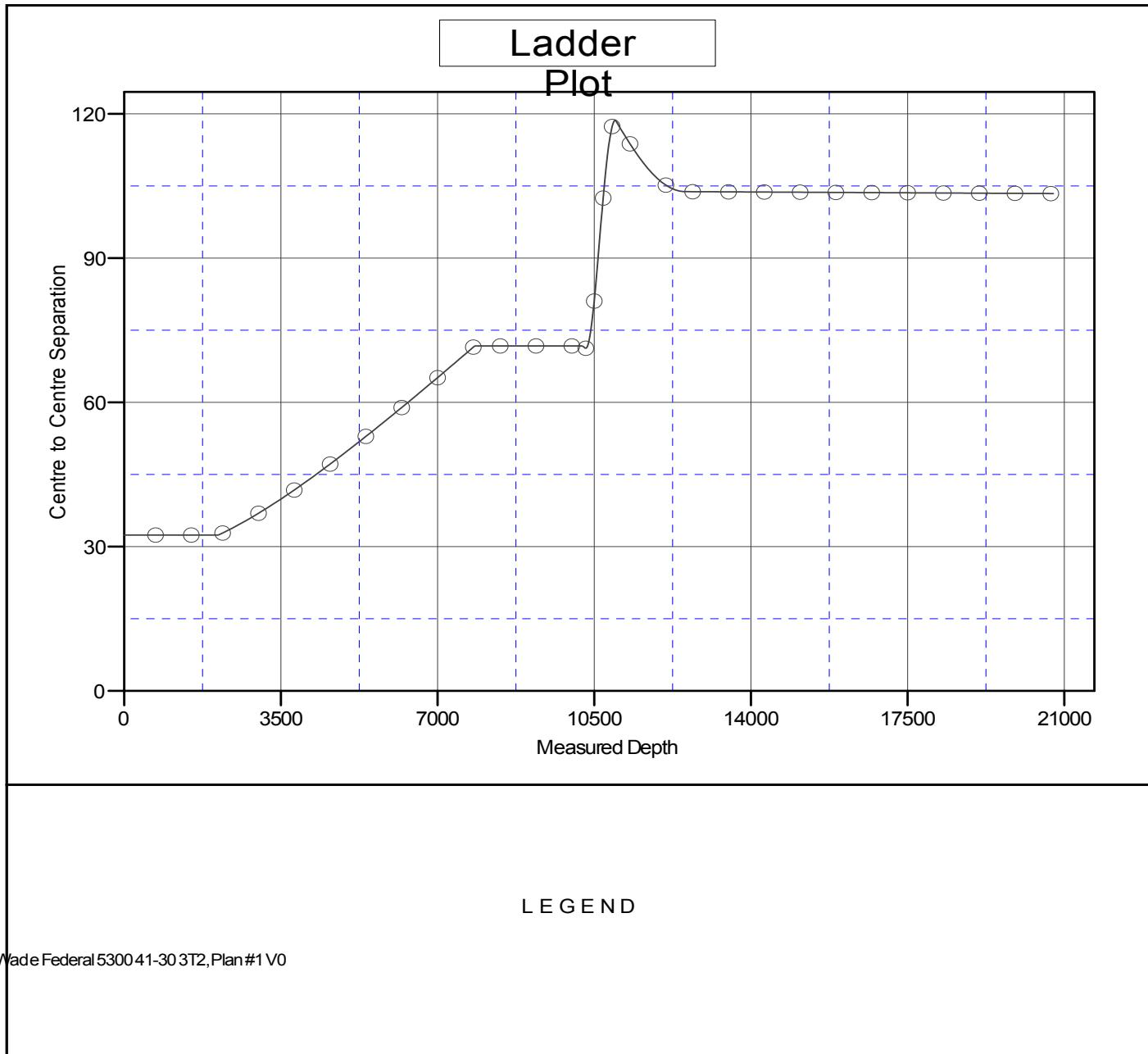
Coordinates are relative to: Wade Federal 5300 31-30 2B

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, North Dakota Northern Zone

Central Meridian is 100° 30' 0.000 W

Grid Convergence at Surface is: -2.31°



Anticollision Report

Company:	Oasis	Local Co-ordinate Reference:	Well Wade Federal 5300 31-30 2B
Project:	Indian Hills	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Reference Site:	153N-100W-29/30	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Wade Federal 5300 31-30 2B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wade Federal 5300 31-30 2B	Database:	OpenWellsCompass - EDM Prod
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 2070.0ft (Original Well Elev)

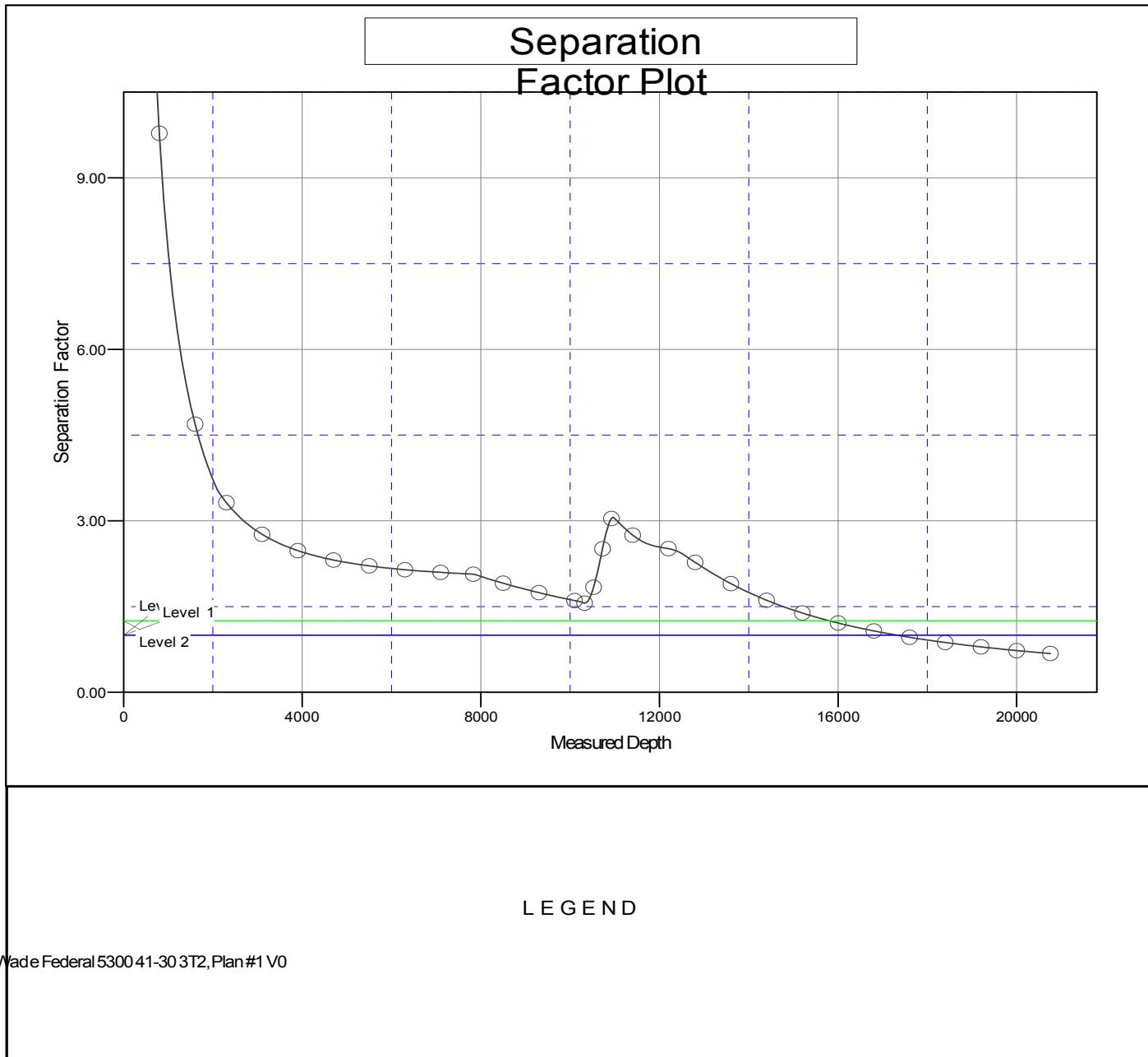
Coordinates are relative to: Wade Federal 5300 31-30 2B

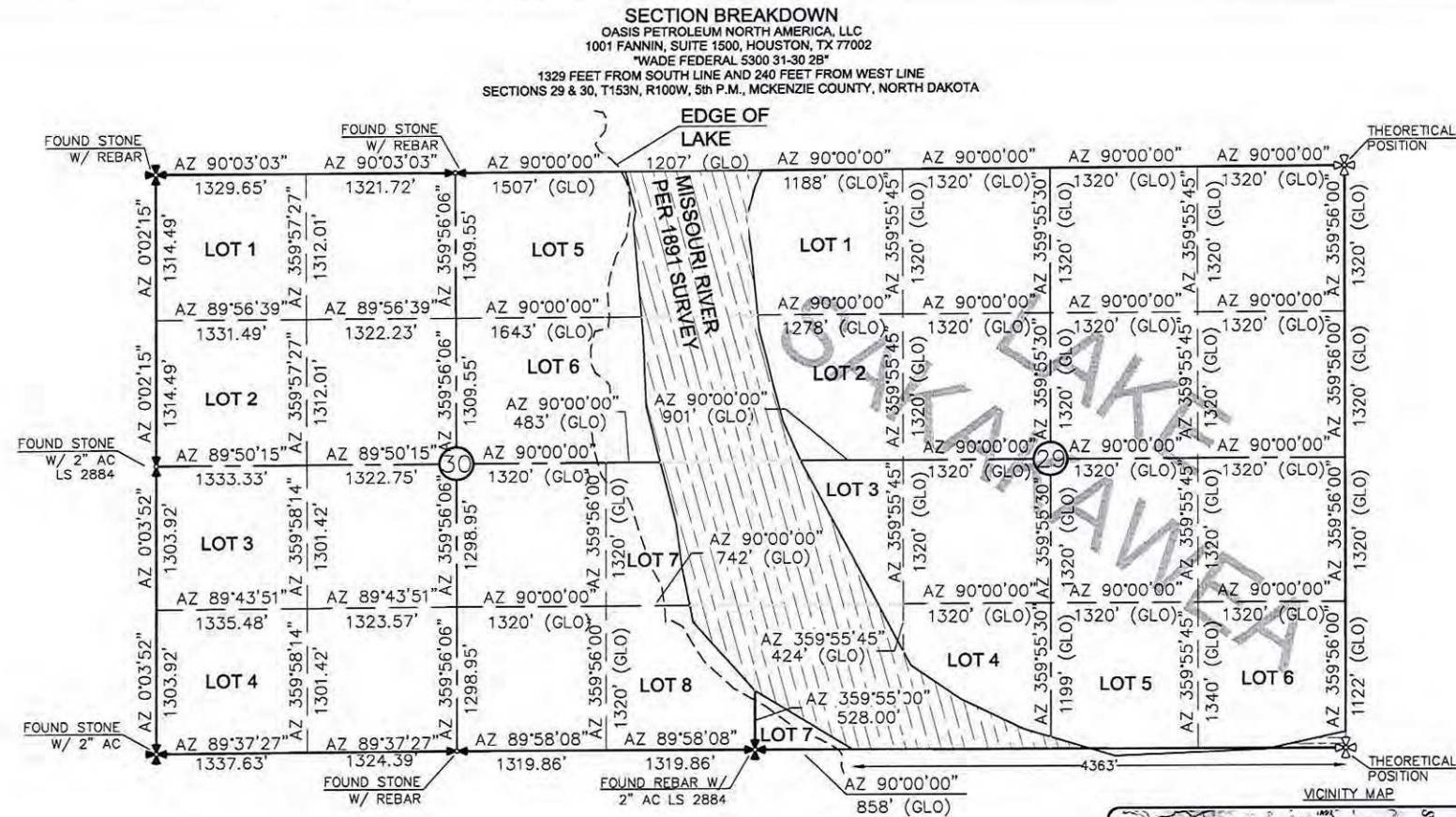
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, North Dakota Northern Zone

Central Meridian is 100° 30' 0.000 W

Grid Convergence at Surface is: -2.31°



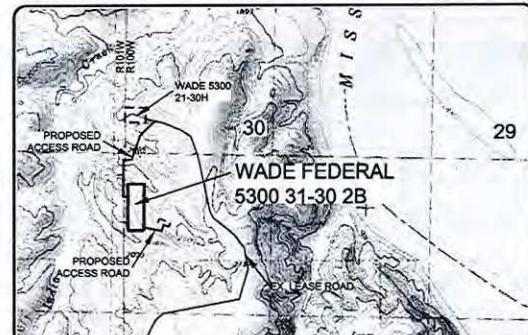
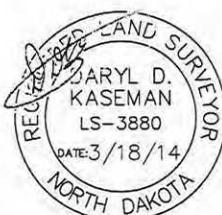


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- MONUMENT - RECOVERED
- MONUMENT - NOT RECOVERED

0 1000
1" = 1000'

ALL AZIMUTHS ARE BASED ON G.P.S. OBSERVATIONS. THE ORIGINAL SURVEY OF THIS AREA FOR THE GENERAL LAND OFFICE (G.L.O.) WAS 1897. 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".



2/8

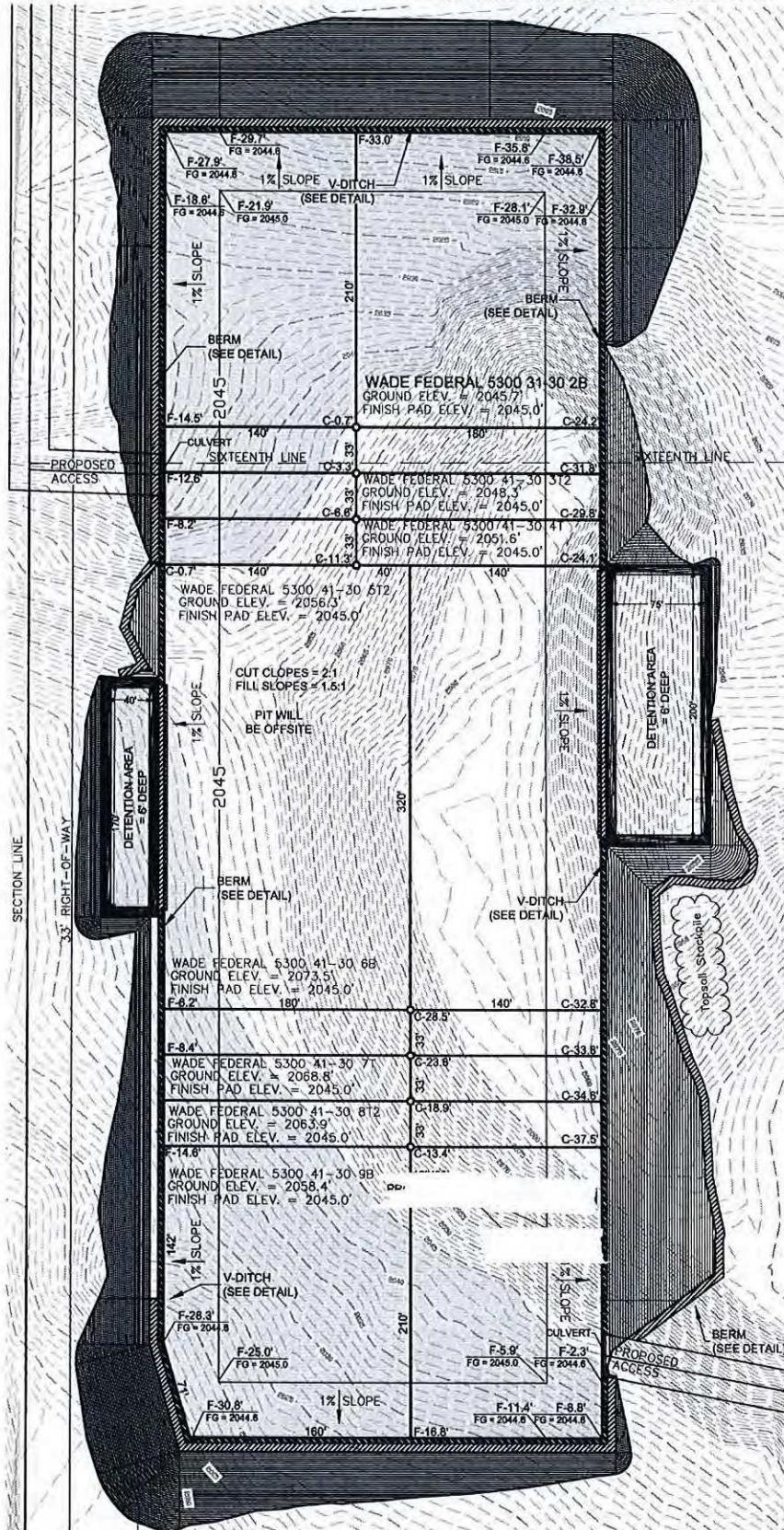
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Project No.: S15303842	Date: JAN 2014
Drawing No.: B14	
Title: SECTION 29 & 30, T153N, R100W, MCKENZIE COUNTY, NORTH DAKOTA	
Prepared by: B14	
Checked by: B14	
Reviewed by: B14	
Approved by: B14	
Date: 01/20/2014	
Comments: None	

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www.interstateinc.com
Offered on the Internet for sale or lease

PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"WADE FEDERAL 5300 31-30 2B"
1329 FEET FROM SOUTH LINE AND 240 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA



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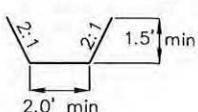
NOTE: Pad dimensions shown are to usable area, the v-ditch and berm areas shall be built to the outside of the pad dimensions.

- BERM
 - DITCH
— Proposed Contours
- - - Original Contours



0 80
1" = 80'

V-DITCH DETAIL



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

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3/8



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www.interstateengineering.com
Other offices in Montana, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC
PAD LAYOUT
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. Project No.: S15-09-381.01
Checked By: D.D.K. Date: JAN 2014

Revision No.	Date	By	Description
REV 1	3/17/14	JDS	Moved wells on pad & access road

WELL LOCATION SITE QUANTITIES

OASIS PETROLEUM NORTH AMERICA, LLC

1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"WADE FEDERAL 5300 31-30 2B"

1329 FEET FROM SOUTH LINE AND 240 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA

WELL SITE ELEVATION	2045.7
WELL PAD ELEVATION	2045.0
EXCAVATION	149,966
PLUS PIT	<u>0</u>
	<u>149,966</u>
EMBANKMENT	113,402
PLUS SHRINKAGE (25%)	<u>28,351</u>
	<u>141,753</u>
STOCKPILE PIT	0
STOCKPILE TOP SOIL (6")	7,955
BERMS	2,533 LF = 821 CY
DITCHES	1,655 LF = 253 CY
DETENTION AREA	4,219 CY
STOCKPILE MATERIAL	3,909
DISTURBED AREA FROM PAD	10.18 ACRES

NOTE: ALL QUANTITIES ARE IN CUBIC YARDS (UNLESS NOTED)

CUT END SLOPES AT 2:1

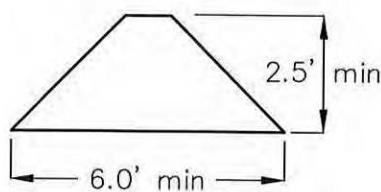
FILL END SLOPES AT 1.5:1

WELL SITE LOCATION

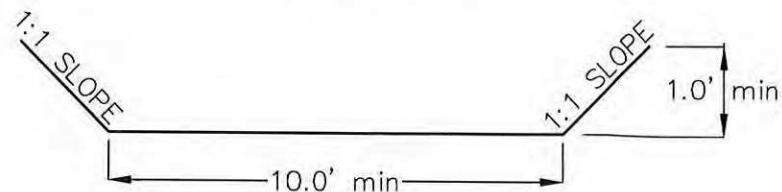
1329' FSL

240' FWL

BERM DETAIL



DITCH DETAIL



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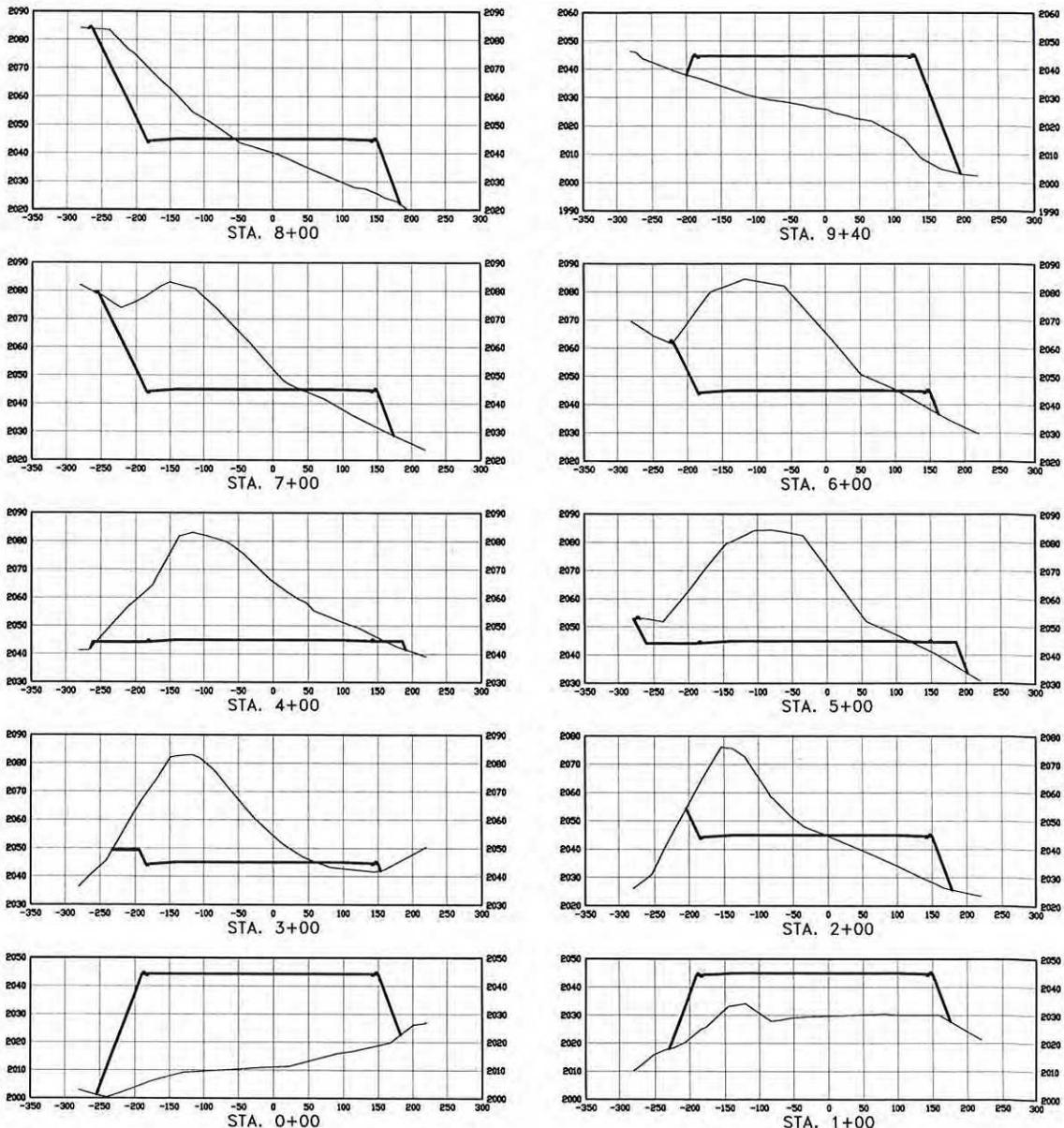
OASIS PETROLEUM NORTH AMERICA, LLC
QUANTITIES
SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	B.H.H.	Project No.:	S13-09-381.01
Checked By:	D.D.K.	Date:	JAN. 2014

Revision No.	Date	By	Description
REV 1	3/17/14	JJS	MOVED WALLS ON PAD & ACCESS ROAD

CROSS SECTIONS
 OASIS PETROLEUM NORTH AMERICA, LLC
 1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
 "WADE FEDERAL 5300.31-30 2B"
 1329 FEET FROM SOUTH LINE AND 240 FEET FROM WEST LINE
 SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA.



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SCALE
 HORIZ 1"=160'
 VERT 1"=40'

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OASIS PETROLEUM NORTH AMERICA, LLC
 CROSS SECTIONS
 SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.C.	Project No.: S13-09-381.01
Checked By: D.D.K.	Date: JAN 2014

Revision No.	Date	By	Description
REV 1	3/17/14	AJS	MOVED WELLS ON PAD & ACCESS ROAD

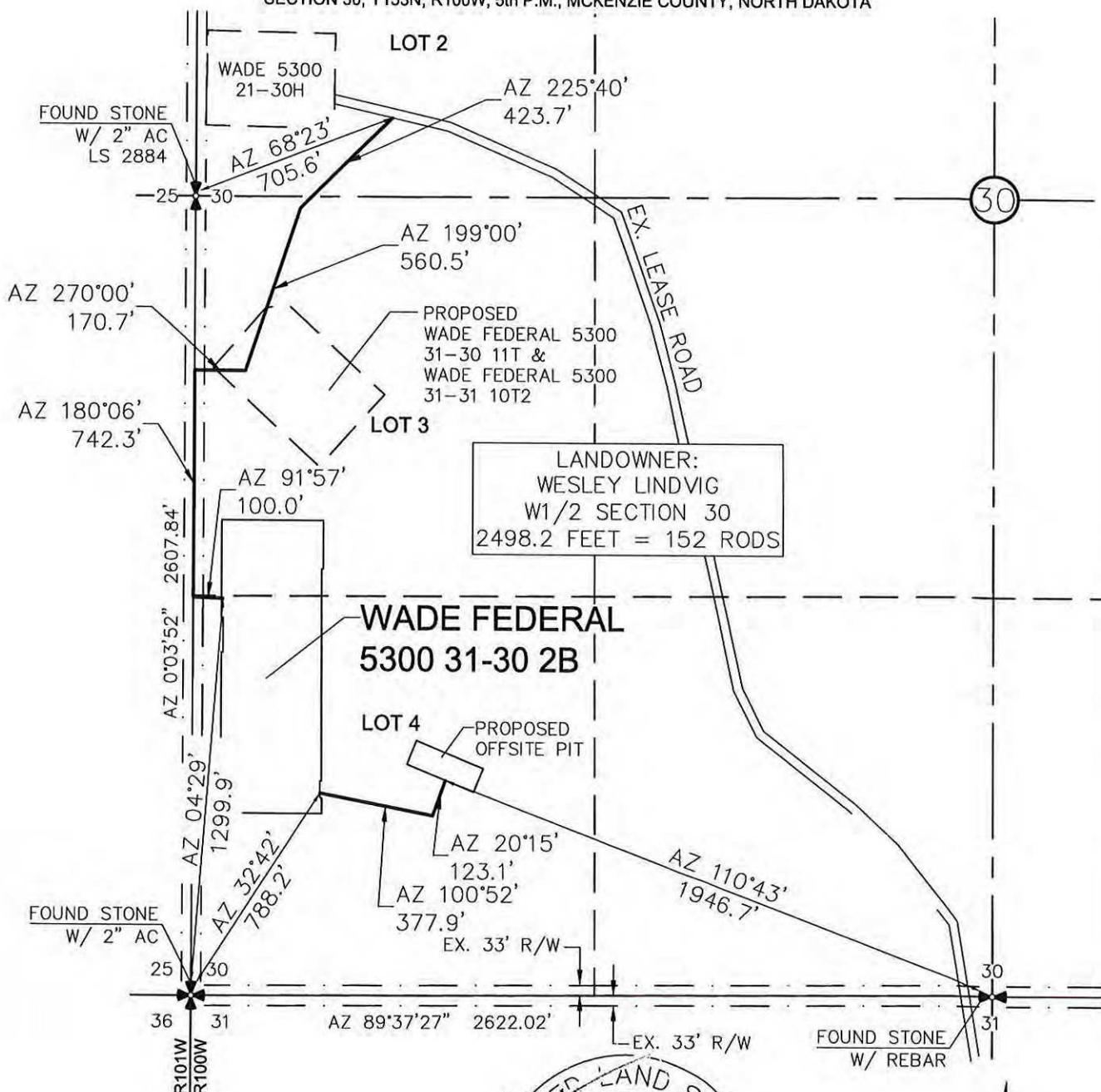
2014 STATE OF NORTH DAKOTA
 PLATINUM EDITION
 1:250,000 Scale
 2014 Edition
 Last Revision Date 03-17-2014
 Last Update Date 03-17-2014
 Last Draw Date 03-17-2014

ACCESS APPROACH

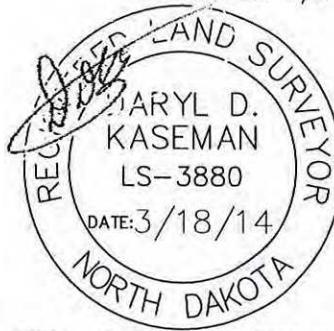
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"WADE FEDERAL 5300 31-30 2B"

1329 FEET FROM SOUTH LINE AND 240 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA



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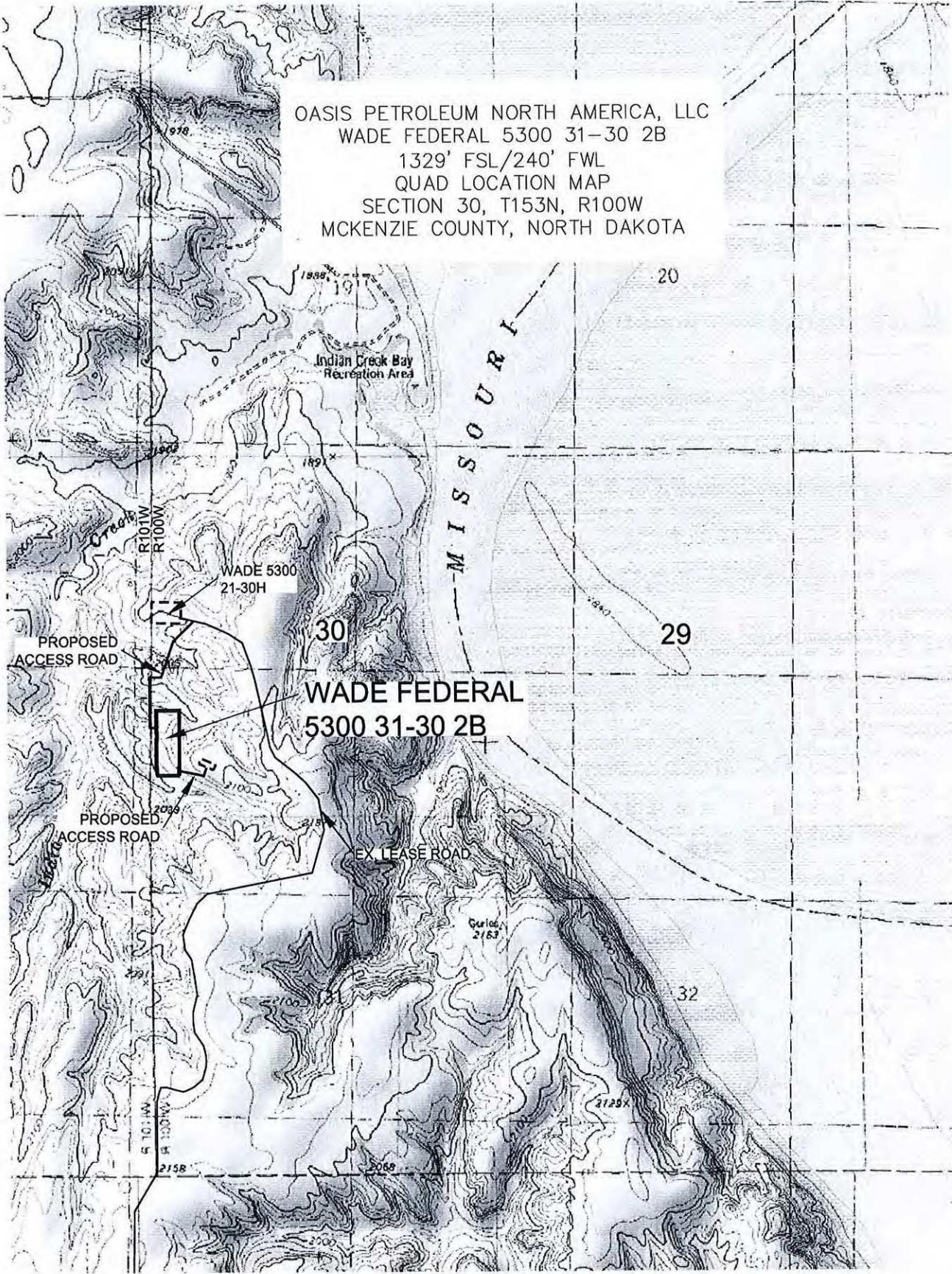
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ACCESS APPROACH
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. Project No.: S13-09-381.01
Checked By: D.D.K. Date: JAN 2014

Revision No.	Date	By	Description
REV 1	3/17/14	JJS	Moved wells on pad & access road



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OASIS PETROLEUM NORTH AMERICA, LLC
QUAD LOCATION MAP
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

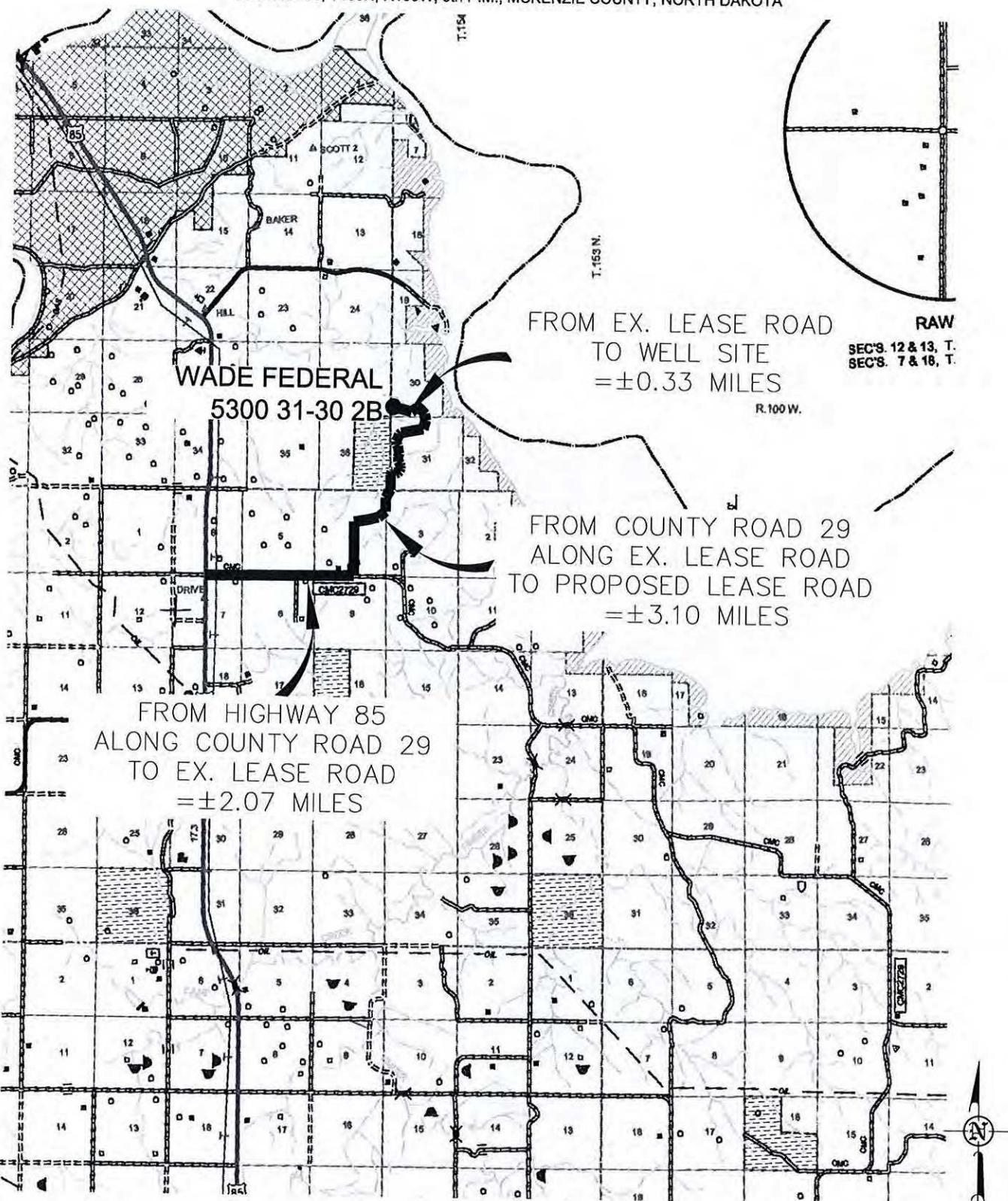
Revision No.	Date	By	Description
REV 1	3/17/14	JJS	Moved wells on pad & access road

COUNTY ROAD MAP

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

"WADE FEDERAL 5300 31-30 2B"

1329 FEET FROM SOUTH LINE AND 240 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA



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SCALE: 1" = 2 MILE

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OASIS PETROLEUM NORTH AMERICA, LLC
COUNTY ROAD MAP
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. Project No.: S13-09-381.01
Checked By: D.D.K. Date: JAN 2014

Revision No.	Date	By	Description
REV 1	3/17/14	JJS	MOVED WELLS ON PAD & ACCESS ROAD

From: [Lauri Stanfield](#)
To: [Webber, Alice D.](#)
Cc: [Lauri Stanfield](#); [Heather McCowan](#); [Brandi Terry](#); [Chelsea Covington](#)
Subject: FW: Wade Federal 5300 41-30 4T, 3T2, 5T2 and 31-30 2B
Date: Thursday, May 15, 2014 9:50:38 AM
Attachments: [image001.png](#)

Alice,

We are aware that the 3T2, 4T, 5T2 penetrate federal minerals and have submitted the APD's to the BLM for approval. The 2B is not in federal minerals so no federal permit was submitted.

Regards,

Lauri M. Stanfield

Regulatory Specialist
1001 Fannin, Suite 1500
Houston, TX 77002
Direct: 281-404-9562



From: Chelsea Covington
Sent: Thursday, May 15, 2014 9:49 AM
To: Lauri Stanfield; Heather McCowan; Brandi Terry
Subject: FW: Wade Federal 5300 41-30 4T, 3T2, 5T2 and 31-30 2B

Please see below

From: Webber, Alice D. [<mailto:adwebber@nd.gov>]
Sent: Thursday, May 15, 2014 9:48 AM
To: Chelsea Covington
Subject: Wade Federal 5300 41-30 4T, 3T2, 5T2 and 31-30 2B

Good morning Chelsea,

Since the laterals for these wells penetrate BLM lands/minerals does Oasis have the requisite BLM permits?

Thanks,
Alice

Alice D. Webber

Engineering Technician IV
North Dakota Industrial Commission
Department of Mineral Resources
Oil and Gas Division
600 E. Boulevard Avenue Dept 405
Bismarck, ND 58501
adwebber@nd.gov
701-328-7996





STATEMENT

This statement is being sent in order to comply with NDAC 43-02-03-16 (Application for permit to drill and recomplete) which states (in part that) "confirmation that a legal street address has been requested for the well site, and well facility if separate from the well site, and the proposed road access to the nearest existing public road". On the date noted below a legal street address was requested from the appropriate county office.

McKenzie County

Aaron Chisolm – McKenzie County Dept.

Wade Federal 5300 31-30 2B

Wade Federal 5300 31-30 3T2

Wade Federal 5300 41-30 4T

Wade Federal 5300 41-30 5T2

Wade Federal 5300 41-30 6B

Wade Federal 5300 41-30 7T

Wade Federal 5300 41-30 8T2

Wade Federal 5300 41-30 9B

A handwritten signature in black ink that reads "Brandi Terry".

Brandi Terry

Regulatory Specialist

Oasis Petroleum North America, LLC

From: [Heather McCowan](#)
To: [Webber, Alice D.](#); [Chelsea Covington](#); [Brandi Terry](#)
Subject: RE: Wade Federal 8 Well Pad
Date: Thursday, June 05, 2014 9:25:20 AM
Attachments: [image002.png](#)

Hell Alice,

The cuttings will be buried offsite for this well. I believe a sundry was sent in.

Thanks,

Heather McCowan

Regulatory Assistant | 1001 Fannin, Suite 1500, Houston, Texas 77002 | 281-404-9563 Direct |
[**hmccowan@oasispetroleum.com**](mailto:hmccowan@oasispetroleum.com)



From: Webber, Alice D. [mailto:adwebber@nd.gov]
Sent: Thursday, June 05, 2014 9:12 AM
To: Chelsea Covington; Brandi Terry; Heather McCowan
Subject: RE: Wade Federal 8 Well Pad

Good morning Ladies,

Just checking in to see if we know where the cuttings are being hauled to for this pad. That is the only thing we are waiting for and I would like to get these permitted for Oasis today.

Thanks,
Alice
