



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.
28425

JAN 10 2018

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

Notice of Intent

Approximate Start Date

Report of Work Done

Date Work Completed
December 17, 2017

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

Well is now on rod pump

Well Name and Number

Wade Federal 5300 41-30 6B

Footages

910

F

S

L

280

F

W

L

Qtr-Qtr
LOT4

Section
30

Township
153 N

Range
100 W

Field

Baker

Pool

Bakken

County

McKenzie

24-HOUR PRODUCTION RATE

Before	After	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 12/17/2017, the above referenced well was equipped with a rod pump. Previously well was on ESP (effective 7/7/2016).

End of Tubing: 2-7/8" L-80 tubing @ 10031'

Pump: 2-1/2" x 2.0" x 24' insert pump @ 9959'

Company Oasis Petroleum North America LLC	Telephone Number 281 404-9494
Address 1001 Fannin, Suite 1500	
City Houston	State TX
Zip Code 77002	
Signature 	Printed Name Sadie Goodrum
Title Regulatory Specialist	Date January 9, 2018
Email Address sgoodrum@oasispetroleum.com	

FOR STATE USE ONLY

<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date 2-1-2018	
By 	
Title JARED THUNE	
Engineering Technician	



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.
28425

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 July 7, 2016
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	Approximate Start Date

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

Well Name and Number Wade Federal 5300 41-30 6B					
Footages	Qtr-Qtr	Section	Township	Range	
910 F S L	280 F W L	LOT4	30	153 N	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 07/07/2016 the above referenced well was converted to ESP pump.

End of Tubing: 2-7/8" L-80 tubing @ 10041.44'

Pump: ESP @ 9888.48'

Company Oasis Petroleum North America LLC		Telephone Number 281 404-9436
Address 1001 Fannin, Suite 1500		
City Houston		State TX
Signature 		Printed Name Jennifer Swenson
Title Regulatory Specialist	Date July 20, 2016	
Email Address jswenson@oasispetroleum.com		

FOR STATE USE ONLY	
<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date 8-9-2016	
By 	
Title TAYLOR ROTH	
Engineering Technician	



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
FEB 22 2016

Well File No.
28425

ND Oil & Gas Division

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 16, 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 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 41-30 6B

Footages 910 F S L	Qtr-Qtr 280 F W L	Section LOT4	Township 30	Range 153 N 100 W
Field Baker	Pool Bakken	County McKenzie		

24-HOUR PRODUCTION RATE

Before	After
Oil	Bbls
Water	Bbls
Gas	MCF

Name of Contractor(s)

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

DETAILS OF WORK

Effective 09/16/2015 the above referenced well is on pump.

End of Tubing: 2-7/8" L-80 tubing @ 10028.46'

Pump: 2-1/2" x 2.0" x 24' insert pump @ 9836.54'

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 19, 2016	
Email Address jswenson@oasispetroleum.com		

FOR STATE USE ONLY

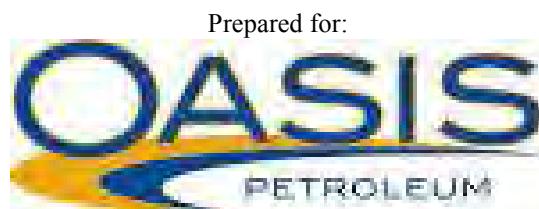
<input checked="" type="checkbox"/> Received	<input type="checkbox"/> Approved
Date 3-8-2016	
By 	
Title TAYLOR ROTH	
Engineering Technician	

Wade Federal 5300 41-30 6B

End of Well Report

Wade Federal 5300 41-30 6B
910' FSL - 280' FWL
SEC 30, T153N, R100W
McKenzie County, ND

Prepared by:
Jake Robertson, *well-site geologist*
Columbine Logging, Inc.
2385 S. Lipan St.
Denver CO 80223



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

1.0 INTRODUCTION

Wade Federal 5200 41-30 6B 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, Jake Robertson and Dylan E. Fowler were the primary well site geologists; providing geo-steering and mud logging from Columbine Logging, Inc.

Well Information

API #: 33-053-05954

Field: Baker

Spud Date: 10/31/2014

TD Date: 10/31/2014

Surface Location: 910' FSL & 280' FWL SEC 30, T153N, R100W, McKenzie County, North Dakota.

Intermediate Casing Point: 994' FSL & 773' FWL; SEC 30; 11,032' MD, 10,725' TVD

Bottom Hole Location: 994' FSL & 773' FEL; SEC 30; 20,450' MD, 10,812' TVD

Surface Elevation: 2045'

KB: 2076'

Casing Shoe: 11,032' MD, 10,727' TVD

Total Depth Drilled: 20,450'

Operator: Oasis

Rig: Patterson 488

Company man: Tyler LaClaire, Bob Brown

Well-site Geologist: Heather Coutts

Jake Robertson, Dylan E. Fowler

Mud logging: Columbine Logging

DD: Schlumberger/Pathfinder

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 10/15/2014. 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 41-30 9B well, located on the same well pad as Wade Federal 5300 41-30 6B. 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.

This well contained two Upper Bakken shale strikes leading to two sidetracks (please refer to Figure 4.1). The first shale strike was at 13,500' MD; 10,721' TVD and the second at approximately 15,100' MD; 10736' TVD.

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	8348	8347	144	0	8347	-6277
Charles Salt	8492	8491	685	-1	8490	-6420
Base Last Salt	9177	9176	215	0	9176	-7106
Mission Canyon	9392	9391	543	1	9392	-7322
Lodgepole	9935	9934	736	0	9934	-7864
False Bakken	10768	10670	9	-11	10659	-8589
Upper Bakken Shale	10786	10679	17	-4	10675	-8605
Middle Bakken	10827	10696	12	-3	10693	-8623
Middle Bakken Top of Target	10827	10708	13	-3	10705	-8635
Middle Bakken Base of Target	10827	10721	16	-3	10718	-8648
Lower Bakken Shale	10827	10737		-3	10734	-8664

Table 3.1 Wade Federal 5300 41-30 6B 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 89.5°.

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 910' FSL & 280' FWL SEC 30, T153N, R100W, McKenzie County, North Dakota. Ground elevation is 2,045' and KB elevation was 2,076', referenced to the Kelly bushing of Patterson 488. The curve was landed in the Middle Bakken at 11,032' MD; 10,725' TVD. The lateral was drilled to TD at 20,450' MD, 10,812' TVD, 994' FSL & 773' FEL; SEC 30. Figure 4.1 shows a cross-section of the lateral.

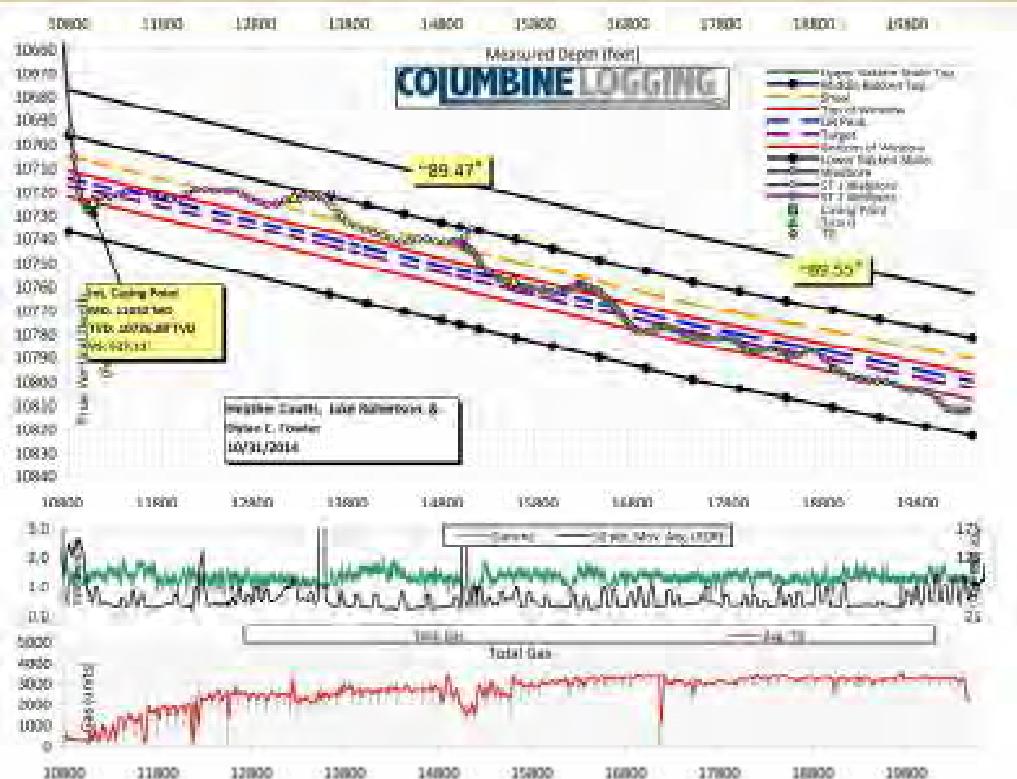


Figure 4.1 Wellbore Cross

5.0 SUMMARY AND CONCLUSION

Wade Federal 5300 41-30 6B 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 89.5°. (see pg. 5, fig 4.1 for a detailed formation dip profile).

Currently the well is awaiting completion.

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





WELL COMPLETION OR RECOMPLETION REPORT - FORM B

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

Well File No. 28425

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 41-30 6B				Spacing Unit Description Sec. 30/29 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 910 F S L	280 F WL	Qtr-Qtr LOT4	Section 30	Township 153 N	Range 100 W	County McKenzie
Spud Date 29 August 30, 2014	Date TD Reached November 1, 2014	Drilling Contractor and Rig Number Patterson 488	KB Elevation (Ft) 2070	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- 10032' to 20425'								Name of Zone (If Different from Pool Name)	
Date Well Completed (SEE INSTRUCTIONS) June 5, 2015			Producing Method Flowing		Pumping-Size & Type of Pump			Well Status (Producing or Shut-In) Producing	
Date of Test 06/28/2015	Hours Tested 24	Choke Size 20 /64	Production for Test		Oil (Bbls) 753	Gas (MCF) 196	Water (Bbls) 1929	Oil Gravity-API (Corr.) 42.0 °	Disposition of Gas Sold
Flowing Tubing Pressure (PSI) 2100		Flowing Casing Pressure (PSI) 2900		Calculated 24-Hour Rate	Oil (Bbls) 753	Gas (MCF) 196	Water (Bbls) 1929	Gas-Oil Ratio 260	

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 04/24/2015	Stimulated Formation Bakken		Top (Ft) 10032	Bottom (Ft) 20425	Stimulation Stages 50	Volume 188339	Volume Units Barrels
Type Treatment Sand Frac	Acid %	Lbs Proppant 9170249	Maximum Treatment Pressure (PSI) 9033			Maximum Treatment Rate (BBLS/Min) 38.0	
Details 40/70 White: 1209680 20/40 White: 6519540 20/40 Resin Coated: 1299520 100 Mesh White: 208460							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							

ADDITIONAL INFORMATION AND/OR LIST OF ATTACHMENTS

This is an amended report to correct the date of first production to June 5, 2015.

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 07/28/2015
Signature 	Printed Name Jennifer Swenson	Title Regulatory Specialist



WELL COMPLETION OR RECOMPLETION REPORT - FORM 6

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

Well File No.
28425



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 41-30 6B

Spacing Unit Description

Sec. 30/29 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

Wildcat

Development

Extension

LOCATION OF WELL

At Surface		Qtr-Qtr	Section	Township	Range	County		
910	F S L	280	F WL	LOT4	30	153 N	100 W	McKenzie
Spud Date 29 August 30, 2014		Date TD Reached November 1, 2014		Drilling Contractor and Rig Number Patterson 488		KB Elevation (Ft) 2070	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)

Well Bore	Type	String Size (Inch)	Top Set (MD Ft)	Depth Set (MD Ft)	Hole Size (Inch)	Weight (Lbs/Ft)	Anchor Set (MD Ft)	Packer Set (MD Ft)	Sacks Cement	Top of Cement
Surface Hole	Surface	13 3/8	0	2110		54.5			969	0
Vertical Hole	Intermediate	9 5/8	0	6085	13 1/2	36			1105	
Vertical Hole	Intermediate	7	0	11032	8 3/4	32			800	3460
Lateral1	Liner	4 1/2	10108	20425	6	13.5				

PERFORATION & OPEN HOLE INTERVALS

Well Bore	Well Bore TD Driller's Depth (MD Ft)	Completion Type	Open Hole/Perforated Interval (MD,Ft)	Kick-off Point (MD Ft)	Top of Casing Window (MD Ft)	Date Perf'd or Drilled	Date Isolated	Isolation Method	Sacks Cement
Lateral1	20450	Perforations	10032 20425	10190		04/24/2015			
	13616			13616					
ST 1	15124		13315 15124						
ST 2	20450		14962 20450						

PRODUCTION

Current Producing Open Hole or Perforated Interval(s), This Completion, Top and Bottom, (MD Ft)					Name of Zone (If Different from Pool Name)		
Lateral 1- 10032' to 20425'							
Date Well Completed (SEE INSTRUCTIONS)		Producing Method		Pumping-Size & Type of Pump			Well Status (Producing or Shut-In)
June 8, 2015		Flowing					Producing
Date of Test 06/28/2015	Hours Tested 24	Choke Size 20 /64	Production for Test	Oil (Bbls) 753	Gas (MCF) 196	Water (Bbls) 1929	Oil Gravity-API (Corr.) 42.0 °
							Disposition of Gas Sold
Flowing Tubing Pressure (PSI) 2100	Flowing Casing Pressure (PSI) 2900	Calculated 24-Hour Rate		Oil (Bbls) 753	Gas (MCF) 196	Water (Bbls) 1929	Gas-Oil Ratio 260

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 04/24/2015	Stimulated Formation Bakken		Top (Ft) 10032	Bottom (Ft) 20425	Stimulation Stages 50	Volume 188339	Volume Units Barrels
Type Treatment Sand Frac	Acid %	Lbs Proppant 9170249	Maximum Treatment Pressure (PSI) 9033			Maximum Treatment Rate (BBLS/Min) 38.0	
Details 40/70 White: 1209680 20/40 White: 6519540 20/40 Resin Coated: 1299520 100 Mesh White: 208460							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							
Date Stimulated	Stimulated Formation		Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)			Maximum Treatment Rate (BBLS/Min)	
Details							

ADDITIONAL INFORMATION AND/OR LIST OF ATTACHMENTS

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records.	Email Address jswenson@oasispetroleum.com	Date 07/16/2015
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.
28425
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 41-30 6B	Qtr-Qtr LOT4	Section 30	Township 163	Range 100	County Williams <i>mckenzie</i>
---	------------------------	----------------------	------------------------	---------------------	---

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 June 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 June 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%	June 1, 2015
Other Transporters Transporting From This Lease	% Transported	Date Effective
		June 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 <i>Dina Barron</i>	Printed Name Dina Barron Title Mktg. Contracts Administrator
Above Signature Witnessed By:	
Signature <i>Alex Cardona</i>	Printed Name Alexa Cardona Title Marketing Analyst

FOR STATE USE ONLY		
Date Approved JUN 19 2015		
By		
Title <i>Erin Roberson</i>		

Oil & Gas Production Analyst



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

Directional Survey Certification Form

Wade Federal 5300 41-30 #6B

Oasis Petroleum	Original Hole	21-Nov-2014
Company	Well Name	Final report Date
14CC00579	ND, McKenzie County (NAD 83 NZ) Oasis	33-053-05954
PathFinder Job Number	County / State	API Number
N 48° 2' 28.65000"	W 103° 36' 10.82000"	910 ft FSL & 280 ft FWL
N 48.04129167	W 103.60300556	Sec 30 Twn 153 N Rng 100 W
Surface Latitude	Surface Logitude	Surface Section - Township - Range
NAD83 ND State Plane, N Zone, Ft	Patterson 488	KB 32ft @ 2077.00 ft / GL: 2045.00 ft MSL
Datum & Coordinate System	Rig Contractor	Height Reference

Survey Depth **45.00** to **13505.00**
Depth From Depth To

Measurement While Drilling

Type of Survey

Survey Depth **13505.00** to **13616.00**
Depth From Depth To

Straight line projection to Bit/TD

Type of Survey

Site Supervisors		Brittany Feddersen - MWD
	Directional Driller 1	MWD Surveyor 1
	Directional Driller 2	Ryan Wirth - MWD
		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 II

11/21/2014 15:14

Date



Wade Federal 5300 41-30 6B OH MWD 0' to 13616' Definitive Survey
Geodetic Report
(Def Survey)

PATHFINDER
A Schlumberger Company

Report Date:	June 22, 2015 - 11:37 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski									
Client:	Oasis Petroleum	Vertical Section Azimuth:	89.490 ° (True North)									
Field:	ND, McKenzie County (NAD 83 NZ) Oasis 2014	Vertical Section Origin:	0.000 ft, 0.000 ft									
Structure / Slot:	Oasis 30-153N-100W (Wade Federal 5300 41-30 6-9 Pad) - Patterson 488 / Wade Federal 5300 41-30 #6B	TVD Reference Datum:	KB 32ft									
Well:	Wade Federal 5300 41-30 #6B	TVD Reference Elevation:	2077.000 ft above MSL									
Borehole:	Original Hole	Seabed / Ground Elevation:	2045.000 ft above MSL									
UWI / API#:	Unknown / Unknown	Magnetic Declination:	8.403 °									
Survey Name:	Wade Federal 5300 41-30 6B OH MWD 0' to 13616' Definitive	Total Gravity Field Strength:	1000.0448mgn (9.80665 Based)									
Survey Date:	November 06, 2014	Gravity Model:	GARM									
Tort / AHD / DDI / ERD Ratio:	175.259 ° / 3250.983 ft / 5.859 / 0.303	Total Magnetic Field Strength:	56248.302 nT									
Coordinate Reference System:	NAD83 North Dakota State Plane, Northern Zone, Feet	Magnetic Dip Angle:	72.909 °									
Location Lat / Long:	N 48° 2' 28.65000", W 103° 36' 10.82000"	Declination Date:	November 06, 2014									
Location Grid N/E Y/X:	N 395121.237 ft, E 1209643.563 ft	Magnetic Declination Model:	BGGM 2014									
CRS Grid Convergence Angle:	-2.3091 °	North Reference:	True North									
Grid Scale Factor:	0.99993613	Grid Convergence Used:	0.0000 °									
Version / Patch:	2.8.572.0	Total Corr Mag North->True										
		North:	8.4034 °									
		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	395121.24	1209643.56	N 48 2 28.65	W 103 36 10.82
Begin MWD Survey	45.00	0.44	237.26	45.00	-0.15	-0.09	-0.15	0.98	395121.15	1209643.41	N 48 2 28.65	W 103 36 10.82
110.00	0.62	341.06	110.00	-0.47	0.10	-0.47	1.29	395121.36	1209643.10	N 48 2 28.65	W 103 36 10.83	
201.00	0.70	266.04	200.99	-1.18	0.53	-1.18	0.89	395121.82	1209642.40	N 48 2 28.65	W 103 36 10.84	
292.00	0.88	233.70	291.99	-2.30	0.08	-2.30	0.52	395121.41	1209641.27	N 48 2 28.65	W 103 36 10.85	
384.00	1.06	274.91	383.97	-3.72	-0.27	-3.72	0.76	395121.12	1209639.84	N 48 2 28.65	W 103 36 10.87	
474.00	0.97	323.09	473.96	-5.00	0.41	-5.01	0.93	395121.85	1209638.58	N 48 2 28.65	W 103 36 10.89	
564.00	1.32	333.03	563.94	-5.92	1.95	-5.93	0.45	395123.42	1209637.71	N 48 2 28.67	W 103 36 10.91	
655.00	1.49	0.12	654.92	-6.37	4.06	-6.41	0.75	395125.56	1209637.33	N 48 2 28.69	W 103 36 10.91	
745.00	1.85	61.05	744.88	-5.08	5.94	-5.13	1.91	395127.38	1209638.67	N 48 2 28.71	W 103 36 10.90	
836.00	2.64	103.57	835.82	-1.75	6.16	-1.81	1.96	395127.46	1209642.00	N 48 2 28.71	W 103 36 10.85	
928.00	2.73	124.35	927.72	2.10	4.42	2.06	1.06	395125.57	1209645.80	N 48 2 28.65	W 103 36 10.79	
1019.00	1.32	129.07	1018.66	4.68	2.54	4.66	1.56	395123.59	1209648.32	N 48 2 28.65	W 103 36 10.75	
1109.00	0.35	191.21	1108.65	5.43	1.62	5.41	1.33	395122.64	1209649.04	N 48 2 28.67	W 103 36 10.74	
1200.00	0.44	131.24	1199.65	5.63	1.11	5.62	0.44	395122.12	1209649.23	N 48 2 28.66	W 103 36 10.74	
1290.00	0.26	130.18	1289.65	6.04	0.75	6.04	0.20	395121.75	1209649.63	N 48 2 28.66	W 103 36 10.73	
1385.00	0.09	266.65	1384.65	6.13	0.61	6.13	0.35	395121.60	1209649.71	N 48 2 28.66	W 103 36 10.73	
1480.00	0.44	272.59	1479.65	5.69	0.62	5.69	0.37	395121.63	1209649.27	N 48 2 28.65	W 103 36 10.74	
1575.00	0.53	254.49	1574.64	4.91	0.52	4.90	0.19	395121.56	1209648.48	N 48 2 28.65	W 103 36 10.75	
1670.00	0.53	313.93	1669.64	4.17	0.71	4.16	0.55	395121.78	1209647.75	N 48 2 28.66	W 103 36 10.76	
1765.00	0.70	325.14	1764.63	3.53	1.49	3.51	0.22	395122.59	1209647.13	N 48 2 28.66	W 103 36 10.77	
1860.00	1.23	325.62	1859.62	2.63	2.81	2.61	0.56	395123.94	1209646.28	N 48 2 28.68	W 103 36 10.78	
1956.00	0.70	335.44	1955.61	1.82	4.19	1.78	0.58	395125.35	1209645.51	N 48 2 28.69	W 103 36 10.79	
2051.00	0.97	352.63	2050.60	1.49	5.52	1.44	0.38	395126.69	1209645.22	N 48 2 28.70	W 103 36 10.80	
2060.00	0.79	333.74	2059.60	1.45	5.65	1.40	0.77	395126.82	1209645.19	N 48 2 28.71	W 103 36 10.80	
9 5/8" Casing Point	2110.00	0.71	338.14	2109.59	1.19	6.25	1.13	0.19	395127.43	1209644.94	N 48 2 28.71	W 103 36 10.80
2179.00	0.62	345.88	2178.59	0.94	7.01	0.88	0.19	395128.20	1209644.72	N 48 2 28.72	W 103 36 10.81	
2274.00	0.70	314.18	2273.58	0.41	7.91	0.34	0.39	395129.13	1209644.22	N 48 2 28.73	W 103 36 10.82	
2368.00	0.70	337.24	2367.57	-0.22	8.84	-0.30	0.30	395130.08	1209643.62	N 48 2 28.74	W 103 36 10.82	
2463.00	0.79	305.50	2462.57	-0.97	9.76	-1.05	0.44	395131.03	1209642.90	N 48 2 28.75	W 103 36 10.84	
2557.00	1.06	312.71	2556.55	-2.13	10.72	-2.22	0.31	395132.04	1209641.78	N 48 2 28.76	W 103 36 10.85	
2652.00	0.97	323.56	2651.54	-3.24	11.97	-3.34	0.22	395133.33	1209640.70	N 48 2 28.77	W 103 36 10.87	
2747.00	0.62	320.25	2746.53	-4.03	13.01	-4.15	0.37	395134.40	1209639.94	N 48 2 28.78	W 103 36 10.88	
2843.00	0.70	298.91	2842.52	-4.87	13.69	-5.00	0.27	395135.12	1209639.12	N 48 2 28.79	W 103 36 10.89	
2938.00	0.62	301.33	2937.52	-5.82	14.24	-5.94	0.09	395135.70	1209638.20	N 48 2 28.79	W 103 36 10.91	
3033.00	0.53	294.41	3032.51	-6.65	14.69	-6.78	0.12	395136.18	1209637.38	N 48 2 28.77	W 103 36 10.92	
3128.00	1.32	2.26	3127.50	-7.00	15.96	-7.14	1.29	395137.47	1209637.07	N 48 2 28.81	W 103 36 10.93	
3223.00	1.58	1.11	3222.47	-6.91	18.37	-7.07	0.28	395139.87	1209637.24	N 48 2 28.83	W 103 36 10.92	
3318.00	1.58	3.34	3317.44	-6.78	20.98	-6.97	0.06	395142.48	1209637.45	N 48 2 28.86	W 103 36 10.92	
3413.00	1.58	0.09	3412.40	-6.68	23.60	-6.89	0.09	395145.09	1209637.63	N 48 2 28.88	W 103 36 10.92	
3508.00	1.49	5.90	3507.37	-6.53	26.14	-6.76	0.19	395147.62	1209637.86	N 48 2 28.91	W 103 36 10.92	
3603.00	1.32	0.65	3602.34	-6.37	28.46	-6.62	0.22	395149.94	1209638.09	N 48 2 28.93	W 103 36 10.92	
3698.00	1.32	15.31	3697.31	-6.05	30.61	-6.32	0.35	395152.07	1209638.48	N 48 2 28.99	W 103 36 10.91	
3793.00	1.41	8.78	3792.28	-5.56	32.82	-5.85	0.19	395154.26	1209639.04	N 48 2 28.97	W 103 36 10.91	
3888.00	1.23	17.35	3887.26	-5.06	34.95	-5.37	0.28	395156.37	1209639.61	N 48 2 28.99	W 103 36 10.90	
3983.00	1.23	21.15	3982.24	-4.37	36.87	-4.70	0.09	395158.27	1209640.35	N 48 2 29.01	W 103 36 10.89	
4078.00	1.06	37.93	4077.22	-3.45	38.52	-3.79	0.39	395159.87	1209641.33	N 48 2 29.03	W 103 36 10.88	
4173.00	0.79	52.24	4172.21	-2.38	39.61	-2.73	0.37	395160.92	1209642.43	N 48 2 29.04	W 103 36 10.86	
4268.00	0.79	52.33	4267.20	-1.34	40.41	-1.70	0.00	395161.68	1209643.50	N 48 2 29.05	W 103 36 10.84	
4363.00	0.62	75.00	4362.19	-0.32	40.95	-0.68	0.34	395162.17	1209644.53	N 48 2 29.05	W 103 36 10.83	
4458.00	0.70	84.83	4457.18	0.76	41.13	0.39	0.15	395162.32	1209645.61	N 48 2 29.06	W 103 36 10.81	
4553.00	0.44	91.00	4552.18	1.70	41.18	1.34	0.28	395162.32	1209646.56	N 48 2 29.06	W 103 36 10.80	
4648.00	0.62	91.14	4647.18	2.58	41.16	2.21	0.19	395162.27	1209647.43	N 48 2 29.06	W 103 36 10.79	
4743.00	0.53	125.89	4742.17	3.45	40.89	3.08	0.37	395161.97	1209648.29	N 48 2 29.05	W 103 36 10.77	
4838.00	0.53	99.87	4837.17	4.23	40.56	3.87	0.25	395161.61	1209649.07	N 48 2 29.05	W 103 36 10.76	
4933.00	0.53	96.84	4932.16	5.10	40.43	4.74	0.03	395161.44	1209649.93	N 48 2 29.05	W 103 36 10.75	
5028.00	0.79	144.63	5027.16	5.91	39.85	5.56	0.62	395160.82	1209650.72	N 48 2 29.05	W 103 36 10.74	
5123.00	1.06	148.64	5122.14	6.74	38.56	6.39	0.29	395159.51	1209651.50	N 48 2 29.03	W 103 36 10.73	
5219.00	1.06	188.46	5218.13	7.05	36.92	6.72	0.75	395157.86	1209651.77	N 48 2 29.01	W 103 36 10.72	
5313.00	1.06	196.89	5312.11	6.66	35.23	6.34	0.17	395156.18	1209651.32	N 48 2 29.00	W 103 36 10.73	
5409.00	1.06	204.71	5408.10	6.01	33.58	5.72	0.15	395154.55	1209650.63	N 48 2 28.98	W 103 36 10.74	
5503.00	0.88	206.82	5502.08	5.31	32.14	5.03	0.20	395153.15	1209649.88	N 48 2 28.97	W 103 36 10.75	
5598.00	1.49	251.13	5597.06	3.80	31.09	3.53	1.11	395152.16	1209648.34	N 48 2 28.95	W 103 36 10.77	
5693.00	1.67	255.79	5692.03	1.29	30.35	1.02	0.23	395151.52	1209645.80	N 48 2 28.95	W 103 36 10.81	
5788.00	1.67	246.53	5786.99	-1.33	29.46	-1.59	0.28	395150.74	1209643.16	N 48 2 28.94	W 103 36 10.84	
5883.00	1.58	265.96	5881.95	-3.9								

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 °")
	6834.00	0.26	94.46	6832.84	-5.91	33.63	-6.21	0.14	395155.29	1209638.72	N 48 2 28.98	W 103 36 10.91
	6929.00	0.70	303.46	6927.84	-6.18	34.14	-6.48	0.99	395155.61	1209638.46	N 48 2 28.99	W 103 36 10.92
	7024.00	0.44	16.58	7022.84	-6.55	34.81	-6.86	0.75	395156.29	1209638.11	N 48 2 28.99	W 103 36 10.92
	7119.00	0.09	291.55	7117.84	-6.51	35.18	-6.83	0.46	395156.67	1209638.16	N 48 2 29.0	W 103 36 10.92
	7214.00	0.35	295.22	7212.84	-6.84	35.33	-7.16	0.27	395156.83	1209637.83	N 48 2 29.00	W 103 36 10.93
	7309.00	0.44	322.36	7307.83	-7.33	35.75	-7.64	0.22	395157.26	1209637.37	N 48 2 29.00	W 103 36 10.93
	7404.00	0.70	321.10	7402.83	-7.91	36.49	-8.23	0.27	395158.02	1209636.81	N 48 2 29.01	W 103 36 10.94
	7500.00	0.09	155.08	7498.83	-8.24	36.88	-8.57	0.82	395158.43	1209636.49	N 48 2 29.0	W 103 36 10.95
	7595.00	0.35	153.00	7593.83	-8.08	36.55	-8.41	0.27	395158.09	1209636.64	N 48 2 29.0	W 103 36 10.94
	7690.00	0.09	199.30	7688.83	-7.98	36.22	-8.30	0.31	395157.76	1209636.73	N 48 2 29.0	W 103 36 10.94
	7785.00	0.53	252.52	7783.82	-8.42	36.02	-8.74	0.51	395157.58	1209636.28	N 48 2 29.01	W 103 36 10.95
	7880.00	0.62	273.94	7878.82	-9.35	35.92	-9.67	0.24	395157.52	1209635.35	N 48 2 29.00	W 103 36 10.96
	7975.00	0.44	64.56	7973.82	-9.54	36.11	-9.86	1.08	395157.72	1209635.17	N 48 2 29.0	W 103 36 10.97
	8070.00	0.18	104.38	8068.82	-9.06	36.23	-9.38	0.34	395157.82	1209635.65	N 48 2 29.01	W 103 36 10.96
	8164.00	0.26	329.76	8162.82	-9.02	36.38	-9.35	0.43	395157.96	1209635.69	N 48 2 29.01	W 103 36 10.96
	8259.00	0.18	346.62	8257.82	-9.16	36.71	-9.49	0.11	395158.30	1209635.56	N 48 2 29.01	W 103 36 10.96
	8354.00	0.53	355.23	8352.81	-9.23	37.30	-9.56	0.37	395158.88	1209635.51	N 48 2 29.02	W 103 36 10.96
	8449.00	0.44	6.03	8447.81	-9.22	38.10	-9.56	0.13	395159.68	1209635.55	N 48 2 29.03	W 103 36 10.96
	8544.00	0.44	28.97	8542.81	-9.00	38.78	-9.34	0.18	395160.36	1209635.79	N 48 2 29.03	W 103 36 10.96
	8639.00	0.79	30.78	8637.80	-8.48	39.66	-8.83	0.37	395161.22	1209636.34	N 48 2 29.04	W 103 36 10.95
	8735.00	0.88	40.89	8733.79	-7.65	40.79	-8.01	0.18	395162.31	1209637.20	N 48 2 29.05	W 103 36 10.94
	8830.00	1.49	23.32	8828.77	-6.67	42.47	-7.05	0.74	395163.95	1209638.24	N 48 2 29.07	W 103 36 10.92
	8924.00	1.14	27.74	8922.75	-5.73	44.42	-6.13	0.39	395165.87	1209639.23	N 48 2 29.09	W 103 36 10.91
	9019.00	1.06	32.47	9017.73	-4.80	46.00	-5.21	0.13	395167.41	1209640.21	N 48 2 29.10	W 103 36 10.90
	9114.00	0.97	36.95	9112.71	-3.84	47.38	-4.26	0.13	395168.75	1209641.22	N 48 2 29.12	W 103 36 10.88
	9209.00	0.79	34.95	9207.70	-2.97	48.56	-3.40	0.19	395169.89	1209642.12	N 48 2 29.13	W 103 36 10.87
	9304.00	0.44	47.17	9302.70	-2.32	49.35	-2.76	0.39	395170.65	1209642.80	N 48 2 29.14	W 103 36 10.86
	9399.00	0.35	21.37	9397.70	-1.94	49.87	-2.39	0.21	395171.15	1209643.19	N 48 2 29.14	W 103 36 10.86
	9494.00	0.26	11.67	9492.69	-1.79	50.35	-2.24	0.11	395171.63	1209643.36	N 48 2 29.15	W 103 36 10.85
	9589.00	0.35	1.37	9587.69	-1.73	50.85	-2.19	0.11	395172.13	1209643.43	N 48 2 29.15	W 103 36 10.85
	9684.00	0.18	12.38	9682.69	-1.69	51.28	-2.15	0.19	395172.56	1209643.48	N 48 2 29.16	W 103 36 10.85
	9779.00	0.26	72.28	9777.69	-1.45	51.49	-1.91	0.24	395172.76	1209643.73	N 48 2 29.16	W 103 36 10.85
	9874.00	0.09	49.58	9872.69	-1.19	51.61	-1.65	0.19	395172.87	1209644.00	N 48 2 29.16	W 103 36 10.84
	9969.00	0.35	98.47	9967.69	-0.84	51.61	-1.30	0.31	395172.86	1209644.34	N 48 2 29.16	W 103 36 10.84
	10062.00	0.09	211.23	10060.69	-0.60	51.51	-1.06	0.42	395172.74	1209644.58	N 48 2 29.16	W 103 36 10.84
	10157.00	0.35	252.06	10155.69	-0.92	51.36	-1.37	0.30	395172.60	1209644.26	N 48 2 29.16	W 103 36 10.84
	10189.00	1.49	96.74	10187.69	-0.60	51.28	-1.05	0.57	395172.51	1209644.58	N 48 2 29.16	W 103 36 10.84
	10221.00	5.63	93.20	10219.62	1.38	51.14	0.93	12.95	395172.30	1209646.55	N 48 2 29.15	W 103 36 10.81
	10252.00	8.97	91.34	10250.36	5.32	51.00	4.86	10.80	395172.00	1209650.48	N 48 2 29.15	W 103 36 10.75
	10284.00	12.84	89.96	10281.78	11.37	50.94	10.91	12.12	395171.70	1209656.52	N 48 2 29.15	W 103 36 10.66
	10316.00	15.39	87.34	10312.81	19.17	51.14	18.71	8.21	395171.58	1209664.32	N 48 2 29.15	W 103 36 10.54
	10347.00	17.67	85.73	10342.53	27.97	51.69	27.51	7.50	395171.77	1209673.14	N 48 2 29.14	W 103 36 10.42
	10379.00	20.05	85.99	10372.81	38.30	52.43	37.83	7.44	395172.10	1209683.47	N 48 2 29.17	W 103 36 10.26
	10411.00	22.77	86.47	10402.59	49.96	53.20	49.49	8.52	395172.39	1209695.15	N 48 2 29.17	W 103 36 10.09
	10442.00	24.01	87.67	10431.05	62.25	53.82	61.78	4.28	395172.52	1209707.45	N 48 2 29.18	W 103 36 9.91
	10474.00	26.64	90.41	10459.97	75.94	54.03	75.46	9.00	395172.18	1209721.13	N 48 2 29.18	W 103 36 9.71
	10506.00	28.49	93.21	10488.34	90.73	53.56	90.25	7.06	395171.11	1209735.90	N 48 2 29.18	W 103 36 9.49
	10537.00	30.78	94.88	10515.28	106.00	52.47	105.54	7.85	395169.41	1209751.13	N 48 2 29.17	W 103 36 9.27
	10569.00	35.44	94.92	10542.08	123.40	50.97	122.95	14.56	395167.21	1209768.46	N 48 2 29.15	W 103 36 9.01
	10601.00	40.89	95.42	10567.23	143.07	49.19	142.64	17.06	395164.64	1209788.06	N 48 2 29.14	W 103 36 8.72
	10632.00	45.46	95.98	10589.83	164.15	47.08	163.74	14.79	395161.68	1209809.05	N 48 2 29.11	W 103 36 8.41
	10664.00	50.56	93.58	10611.23	187.82	45.12	187.43	16.88	395158.76	1209832.65	N 48 2 29.10	W 103 36 8.06
	10696.00	53.82	90.06	10630.85	213.08	44.33	212.69	13.39	395156.96	1209857.85	N 48 2 29.09	W 103 36 7.69
	10727.00	55.05	86.71	10648.88	238.28	45.05	237.89	9.64	395156.66	1209883.06	N 48 2 29.09	W 103 36 7.32
	10759.00	59.88	84.74	10666.09	265.19	47.07	264.78	15.96	395157.60	1209910.01	N 48 2 29.11	W 103 36 6.92
	10791.00	63.49	84.38	10681.27	293.25	49.74	292.82	11.32	395159.14	1209938.13	N 48 2 29.14	W 103 36 6.51
	10823.00	67.27	85.78	10694.60	322.25	52.23	321.80	12.46	395160.46	1209967.18	N 48 2 29.17	W 103 36 6.08
	10854.00	72.19	89.01	10705.33	351.30	53.54	350.84	18.64	395160.59	1209996.25	N 48 2 29.18	W 103 36 5.66
	10886.00	76.59	89.52	10713.94	382.11	53.93	381.65	13.84	395159.75	1210027.05	N 48 2 29.18	W 103 36 5.20
	10918.00	81.07	91.75	10720.14	413.49	53.58	413.03	15.58	395158.13	1210058.39	N 48 2 29.18	W 103 36 4.74
	10950.00	85.30	91.77	10723.94	445.23	52.60	444.78	13.22	395155.88	1210090.07	N 48 2 29.17	W 103 36 4.27
	10965.00	88.20	91.73	10724.79	460.19	52.15	459.75	19.34	395154.82	1210105.01	N 48 2 29.16	W 103 36 4.05
7" Casing Point	10981.00	88.93	91.31	10725.19	476.18	51.72	475.74	5.28	395153.75	1210120.97	N 48 2 29.16	W 103 36 3.82
	11055.00	92.33	89.38	10724.37	550.15	51.27	549.72	5.28	395150.32	1210194.86	N 48 2 29.16	W 103 36 2.73
	11147.00	90.31	90.00	10722.25	642.12	51.77	641.68	2.30	395147.11	1210286.77	N 48 2 29.16	W 103 36 1.38
	11239.00	90.13	89.41	10721.34	734.12	52.25	733.68	0.67	395143.88	1210278.71	N 48 2 29.17	W 103 36 0.02
	11331.00	90.57	89.59	10721.34	826.12	53.05	825.68	0.52	395140.98	1210470.65	N 48 2 29.17	W 103 35 58.67
	11422.00	91.63	88.65	10719.59	917.10	54.45	916.65	1.56	395138.71	1210561.60	N 48 2 29.19	W 103 35 57.33
	11514.00	89.87	88.79	10718.39	1009.08	56.50	1008.61	1.92	395137.05	1210653.57	N 48 2 29.21	W 103 35 55.98
	11606.00	88.02	90.05	10720.08	1101.05	57.43	1100.59	2.43	395134.28	1210745.50	N 48 2 29.22	

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	32.000	13505.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Hole / Wade Federal 5300 41-30 6B OH MWD 0' to				
	1	13505.000	13616.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	Original Hole / Wade Federal 5300 41-30 6B OH MWD 0' to				



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

Directional Survey Certification Form

Oasis Petroleum	Wade Federal 5300 41-30 #6B ST1	21-Nov-2014
Company	Well Name	Final report Date
14CCO0579	ND, McKenzie County (NAD 83 NZ) Oasis	33-053-05954
PathFinder Job Number	County / State	API Number
N 48° 2' 28.65000"	W 103° 36' 10.82000"	910 ft FSL & 280 ft FWL
N 48.04129167	W 103.60300556	Sec 30 Twn 153 N Rng 100 W
Surface Latitude	Surface Longitude	Surface Section - Township - Range
NAD83 ND State Plane, N Zone, Ft	Patterson 488	KB 32ft @ 2077.00 ft / GL: 2045.00 ft MSL
Datum & Coordinate System	Rig Contractor	Height Reference
Survey Depth	13378.00	15052.87
	Depth From	Depth To
Measurement While Drilling		
Type of Survey		
Survey Depth	15052.87	15124.00
	Depth From	Depth To
Straight line projection to Bit/TD		
Type of Survey		
Site Supervisors	Brittany Feddersen - MWD	
	MWD Surveyor 1	
	Ryan Wirth - MWD	
	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 II

11/21/2014 15:23

Date



Wade Federal 5300 41-30 6B ST1 13315' to 15124' Definitive Survey
Geodetic Report
(Def Survey)

PATHFINDER
A Schlumberger Company

Report Date:	June 22, 2015 - 01:12 PM		Survey / DLS Computation:	Minimum Curvature / Lubinski								
Client:	Oasis Petroleum		Vertical Section Azimuth:	89.490 ° (True North)								
Field:	ND, McKenzie County (NAD 83 NZ) Oasis 2014		Vertical Section Origin:	0.000 ft, 0.000 ft								
Structure / Slot:	Oasis 30-153N-100W (Wade Federal 5300 41-30 6-9 Pad) - Patterson 488 / Wade Federal 5300 41-30 #6B		TVD Reference Datum:	KB								
Well:	Wade Federal 5300 41-30 #6B		TVD Reference Elevation:	2077.000 ft above MSL								
Borehole:	ST1		Seabed / Ground Elevation:	2045.000 ft above MSL								
UWI / API#:	Unknown / Unknown		Magnetic Declination:	8.403 °								
Survey Name:	Wade Federal 5300 41-30 6B ST1 13315' to 15124' Definitive		Total Gravity Field Strength:	1000.0448mgn (9.80665 Based)								
Survey Date:	November 06, 2014		Gravity Model:	GARM								
Tort / AHD / DDI / ERD Ratio:	198.247 ° / 4758.505 ft / 6.123 / 0.443		Total Magnetic Field Strength:	56248.302 nT								
Coordinate Reference System:	NAD83 North Dakota State Plane, Northern Zone, Feet		Magnetic Dip Angle:	72.909 °								
Location Lat / Long:	N 48° 2' 28.65000", W 103° 36' 10.82000"		Declination Date:	November 06, 2014								
Location Grid NE Y/X:	N 395121.237 ft, E 1209643.563 ft		Magnetic Declination Model:	BGGM 2014								
CRS Grid Convergence Angle:	-2.3091 °		North Reference:	True North								
Grid Scale Factor:	0.99993613		Grid Convergence Used:	0.0000 °								
Version / Patch:	2.8.572.0		Total Corr Mag North->True									
			North:	8.4034 °								
			Local Coord Referenced To:	Well Head								
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 °)
Tie-Into Original Hole	13315.00	90.31	89.80	10721.49	2809.60	92.75	2808.89	N/A	395100.74	1212453.73	N 48 2 29.56	W 103 35 29.49
Begin ST1 Survey	13378.00	90.31	89.85	10721.15	2872.60	92.94	2871.89	0.08	395098.40	1212516.68	N 48 2 29.57	W 103 35 28.56
	13473.00	89.87	89.93	10721.00	2967.60	93.12	2966.88	0.47	395094.75	1212611.60	N 48 2 29.57	W 103 35 27.16
	13505.00	88.37	90.90	10721.50	2999.59	92.89	2998.88	5.58	395093.23	1212643.56	N 48 2 29.56	W 103 35 26.69
	13537.00	87.93	90.87	10722.53	3031.56	92.40	3030.86	1.38	395091.45	1212675.49	N 48 2 29.56	W 103 35 26.22
	13569.00	88.11	90.88	10723.63	3063.53	91.91	3062.84	0.56	395089.67	1212707.42	N 48 2 29.55	W 103 35 25.75
	13601.00	87.49	91.98	10724.86	3095.49	91.11	3094.80	3.94	395087.59	1212739.32	N 48 2 29.55	W 103 35 25.28
	13632.00	87.49	91.81	10726.22	3126.43	90.09	3125.75	0.55	395085.32	1212770.21	N 48 2 29.54	W 103 35 24.82
	13696.00	87.49	90.83	10729.02	3190.34	88.61	3189.68	1.53	395081.27	1212834.02	N 48 2 29.52	W 103 35 23.88
	13730.00	88.20	89.94	10730.30	3224.31	88.39	3223.65	3.35	395079.67	1212867.95	N 48 2 29.52	W 103 35 23.38
	13791.00	87.85	90.06	10732.40	3285.27	88.39	3284.61	0.61	395077.22	1212928.86	N 48 2 29.52	W 103 35 22.48
	13885.00	89.16	88.72	10734.86	3379.23	89.39	3378.57	1.99	395074.43	1213022.78	N 48 2 29.53	W 103 35 21.10
	13979.00	89.25	87.32	10736.16	3473.19	92.63	3472.50	1.49	395073.89	1213116.76	N 48 2 29.56	W 103 35 19.72
	14074.00	89.08	88.87	10737.55	3568.15	95.79	3567.44	1.64	395073.22	1213211.74	N 48 2 29.59	W 103 35 18.32
	14169.00	89.34	89.15	10738.86	3663.14	97.43	3662.42	0.40	395071.04	1213306.70	N 48 2 29.61	W 103 35 16.93
	14264.00	88.99	88.93	10740.24	3758.12	99.02	3757.39	0.44	395068.80	1213401.65	N 48 2 29.62	W 103 35 15.53
	14359.00	89.69	91.28	10741.33	3853.11	98.85	3852.38	2.58	395064.80	1213496.55	N 48 2 29.62	W 103 35 14.13
	14454.00	90.48	91.65	10741.19	3948.05	96.42	3947.35	0.92	395058.55	1213591.34	N 48 2 29.6	W 103 35 12.73
	14549.00	90.66	91.23	10740.25	4042.99	94.03	4042.31	0.48	395052.34	1213686.12	N 48 2 29.57	W 103 35 11.33
	14645.00	89.52	90.73	10740.10	4138.95	92.39	4138.30	1.30	395046.83	1213781.96	N 48 2 29.56	W 103 35 9.92
	14740.00	89.08	90.43	10741.26	4233.93	91.43	4233.28	0.56	395042.04	1213876.82	N 48 2 29.55	W 103 35 8.52
	14835.00	90.75	91.40	10741.40	4328.89	89.91	4328.27	2.03	395036.70	1213971.66	N 48 2 29.53	W 103 35 7.13
	14930.00	89.60	90.81	10741.11	4423.85	88.08	4423.25	1.36	395031.04	1214066.48	N 48 2 29.51	W 103 35 5.73
Last ST1 Survey	15052.87	93.21	92.11	10738.19	4546.60	85.23	4546.03	3.84	395023.24	1214189.04	N 48 2 29.49	W 103 35 3.92
Projection to Bit	15124.00	93.21	92.11	10734.21	4617.55	82.61	4617.00	0.00	395017.77	1214259.84	N 48 2 29.46	W 103 35 2.88

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	32.000	1/98.425	30.000	30.000	SLB_MWD-STD-Depth Only
	1	32.000	32.000	Act Stns	30.000	30.000	SLB_MWD-STD-Depth Only
	1	32.000	13315.000	Act Stns	30.000	30.000	SLB_MWD-STD
	1	13315.000	15052.870	Act Stns	30.000	30.000	SLB_MWD-STD
	1	15052.870	15124.000	Act Stns	30.000	30.000	SLB_BLIND+TREND



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

Directional Survey Certification Form

Oasis Petroleum	Wade Federal 5300 41-30 #6B ST2	21-Nov-2014
Company	Well Name	Final report Date
14CCO0579	ND, McKenzie County (NAD 83 NZ) Oasis	33-053-05954
PathFinder Job Number	County / State	API Number
N 48° 2' 28.65000"	W 103° 36' 10.82000"	910 ft FSL & 280 ft FWL
N 48.04129167	W 103.60300556	Sec 30 Twn 153 N Rng 100 W
Surface Latitude	Surface Longitude	Surface Section - Township - Range
NAD83 ND State Plane, N Zone, Ft	Patterson 488	KB 32ft @ 2077.00 ft / GL: 2045.00 ft MSL
Datum & Coordinate System	Rig Contractor	Height Reference
Survey Depth	14962.00	20377.00
	Depth From	Depth To
Measurement While Drilling		
Type of Survey		
Survey Depth	20377.00	20450.00
	Depth From	Depth To
Straight line projection to Bit/TD		
Type of Survey		
Site Supervisors	Brittany Feddersen - MWD	
	MWD Surveyor 1	
	Ryan Wirth - MWD	
	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 II

11/21/2014 15:31

Date



Wade Federal 5300 41-30 6B ST2 14930' to 20450' Definitive Survey
Geodetic Report
(Def Survey)

PATHFINDER
A Schlumberger Company

Report Date:	November 21, 2014 - 03:28 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Oasis Petroleum	Vertical Section Azimuth:	89.490 ° (True North)
Field:	ND, McKenzie County (NAD 83 NZ) Oasis 2014	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Oasis 30-153N-100W (Wade Federal 5300 41-30 Pad) - Patterson 488 / Wade Federal 5300 41-30 #6B	TVD Reference Datum:	KB
Well:	Wade Federal 5300 41-30 #6B	TVD Reference Elevation:	2077.000 ft above MSL
Borehole:	ST2	Seabed / Ground Elevation:	2045.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	8.403 °
Survey Name:	Wade Federal 5300 41-30 6B ST2 14930' to 20450' Definitive	Total Gravity Field Strength:	1000.0448mgn (9.80665 Based)
Survey Date:	November 06, 2014	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	279.441 ° / 10083.358 ft / 6.727 / 0.933	Total Magnetic Field Strength:	56248.302 nT
Coordinate Reference System:	NAD83 North Dakota State Plane, Northern Zone, Feet	Magnetic Dip Angle:	72.909 °
Location Lat / Long:	N 48° 2' 28.65000", W 103° 36' 10.82000"	Declination Date:	November 06, 2014
Location Grid N/E Y/X:	N 395121.237 ft, E 1209643.563 ft	Declination Model:	BGGM 2014
CRS Grid Convergence Angle:	-2.3091 °	North Reference:	True North
Grid Scale Factor:	0.99993613	Grid Convergence Used:	0.0000 °
Version / Patch:	2.8.572.0	Total Corr Mag North->True	
		North:	8.4034 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (%100ft)	Northing (ft)	Easting (ft)	Latitude (N/S/E/W) (ft)	Longitude (N/S/E/W) (ft)
Tie-In to ST1	14930.00	89.60	90.81	10741.11	4423.85	88.08	4423.25	N/A	395031.04	1214066.48	N 48 2 29.51	W 103 35 5.73
Begin ST2	14962.00	89.34	90.69	10741.41	4455.85	87.66	4455.24	0.89	395029.33	1214098.43	N 48 2 29.51	W 103 35 5.26
Survey	14994.00	90.75	91.22	10741.38	4487.83	87.13	4487.24	4.71	395027.51	1214130.38	N 48 2 29.50	W 103 35 4.79
	15026.00	87.85	90.91	10741.77	4519.82	86.53	4519.23	9.11	395025.63	1214162.32	N 48 2 29.50	W 103 35 4.32
	15042.00	87.76	91.75	10742.38	4535.80	86.16	4535.21	5.28	395024.62	1214178.27	N 48 2 29.49	W 103 35 4.08
	15057.00	88.11	90.88	10742.92	4550.78	85.82	4550.20	6.25	395023.67	1214193.23	N 48 2 29.49	W 103 35 3.86
	15074.00	88.02	91.77	10743.50	4567.76	85.43	4567.18	5.26	395022.59	1214210.19	N 48 2 29.49	W 103 35 3.61
	15089.00	88.55	90.90	10743.95	4582.75	85.08	4582.17	6.79	395021.64	1214225.15	N 48 2 29.48	W 103 35 3.39
	15121.00	88.37	90.95	10744.81	4614.72	84.56	4614.15	0.58	395019.83	1214257.08	N 48 2 29.48	W 103 35 2.92
	15153.00	87.32	91.03	10746.01	4646.69	84.01	4646.13	3.29	395017.99	1214289.00	N 48 2 29.47	W 103 35 2.45
	15185.00	86.35	90.22	10747.78	4678.63	83.66	4678.07	3.95	395016.36	1214320.91	N 48 2 29.47	W 103 35 1.98
	15216.00	86.70	90.04	10749.66	4709.58	83.59	4709.02	1.27	395015.04	1214351.82	N 48 2 29.47	W 103 35 1.52
	15280.00	87.85	90.03	10752.70	4773.50	83.55	4772.94	1.80	395012.43	1214175.69	N 48 2 29.47	W 103 35 0.58
	15311.00	88.02	90.05	10753.82	4804.48	83.53	4803.92	0.55	395011.16	121446.65	N 48 2 29.47	W 103 35 0.13
	15406.00	88.90	90.15	10756.37	4899.44	83.36	4898.89	0.93	395007.17	1214541.52	N 48 2 29.47	W 103 34 58.73
	15438.00	89.16	90.22	10756.91	4931.43	83.26	4930.88	0.84	395005.77	1214573.48	N 48 2 29.47	W 103 34 58.26
	15502.00	89.43	90.05	10757.70	4995.42	83.11	4994.88	0.50	395003.04	1214637.42	N 48 2 29.46	W 103 34 57.32
	15597.00	89.34	90.17	10758.72	5090.41	82.93	5089.87	0.16	394999.04	1214732.32	N 48 2 29.46	W 103 34 55.92
	15691.00	89.08	89.37	10760.01	5184.40	83.30	5183.86	0.89	394995.63	1214826.24	N 48 2 29.47	W 103 34 54.54
	15786.00	90.31	89.52	10760.52	5279.40	84.22	5278.85	1.30	394992.72	1214921.19	N 48 2 29.47	W 103 34 53.14
	15882.00	88.99	90.18	10761.11	5275.39	84.48	5374.85	1.54	394989.10	1215017.11	N 48 2 29.48	W 103 34 51.73
	15977.00	89.87	90.03	10762.05	5470.38	84.30	5469.84	0.94	394985.10	1215121.01	N 48 2 29.47	W 103 34 50.33
	16073.00	90.75	90.03	10761.53	5566.37	84.25	5565.84	0.92	394981.18	1215207.92	N 48 2 29.47	W 103 34 48.91
	16168.00	90.22	90.97	10760.73	5661.35	83.42	5660.83	1.14	394976.53	1215302.80	N 48 2 29.46	W 103 34 47.52
	16199.00	91.28	90.56	10760.32	5692.34	83.01	5691.83	3.67	394974.87	1215333.75	N 48 2 29.46	W 103 34 47.06
	16263.00	91.45	91.38	10758.80	5756.30	81.93	5755.80	1.31	394971.21	1215397.62	N 48 2 29.45	W 103 34 46.12
	16294.00	88.81	91.31	10758.73	5787.28	81.20	5786.79	8.52	394969.23	1215428.55	N 48 2 29.44	W 103 34 45.66
	16312.00	88.90	91.29	10759.09	5805.27	80.79	5804.78	0.51	394968.10	121546.51	N 48 2 29.44	W 103 34 45.40
	16326.00	88.90	91.15	10759.36	5819.26	80.49	5818.77	1.00	394967.24	1215460.48	N 48 2 29.44	W 103 34 45.19
	16358.00	88.90	91.15	10759.97	5851.24	79.85	5850.76	0.00	394965.31	1215492.42	N 48 2 29.43	W 103 34 44.72
	16390.00	89.52	91.67	10760.41	5883.22	79.06	5882.75	2.53	394963.23	1215524.35	N 48 2 29.42	W 103 34 44.25
	16453.00	89.52	91.65	10760.94	5946.17	77.24	5945.72	0.03	394958.87	1215587.19	N 48 2 29.41	W 103 34 43.32
	16500.00	87.76	91.38	10762.05	5993.13	75.99	5992.69	3.79	394955.74	1215634.07	N 48 2 29.39	W 103 34 42.63
	16549.00	88.20	92.63	10763.78	6042.05	74.28	6041.63	2.70	394952.05	1215682.89	N 48 2 29.37	W 103 34 41.91
	16580.00	87.76	91.54	10764.87	6073.00	73.15	6072.59	3.79	394949.68	1215713.78	N 48 2 29.36	W 103 34 41.46
	16611.00	87.41	89.55	10766.18	6103.96	72.86	6103.56	6.51	394948.14	1215744.71	N 48 2 29.36	W 103 34 41.00
	16643.00	87.85	89.82	10767.50	6135.94	73.04	6135.53	1.61	394947.03	1215776.66	N 48 2 29.35	W 103 34 40.53
	16674.00	87.14	90.51	10768.86	6166.90	72.95	6166.50	3.19	394945.69	1215807.60	N 48 2 29.33	W 103 34 40.08
	16705.00	87.41	89.40	10770.33	6197.87	72.97	6197.46	3.68	394944.47	1215838.54	N 48 2 29.33	W 103 34 39.62
	16737.00	87.23	88.90	10771.83	6229.83	73.44	6229.42	1.66	394943.65	1215870.49	N 48 2 29.36	W 103 34 39.15
	16768.00	87.32	88.20	10773.30	6260.79	74.23	6260.38	2.27	394943.19	1215901.45	N 48 2 29.37	W 103 34 38.69
	16799.00	87.23	88.50	10774.78	6291.75	75.12	6291.33	1.01	394942.83	1215932.41	N 48 2 29.38	W 103 34 38.24
	16830.00	87.14	88.37	10776.30	6322.71	75.97	6322.28	0.51	394942.43	1215963.37	N 48 2 29.39	W 103 34 37.78
	16862.00	88.90	86.64	10777.40	6354.67	77.36	6354.23	7.71	394942.53	1215995.34	N 48 2 29.40	W 103 34 37.31
	16893.00	89.16	86.55	10777.93	6385.62	79.20	6385.17	0.89	394943.13	1216026.33	N 48 2 29.42	W 103 34 36.86
	16924.00	89.34	86.87	10778.34	6416.58	80.98	6416.12	1.18	394943.66	1216057.32	N 48 2 29.44	W 103 34 36.40
	16918.00	90.48	88.71	10778.48	6510.54	84.60	6510.04	2.30	394942.50	1216151.31	N 48 2 29.47	W 103 34 35.02
	17113.00	90.92	88.28	10777.32	6605.51	87.10	6605.00	0.65	394942.16	1216246.29	N 48 2 29.50	W 103 34 33.62
	17175.00	90.04	89.48	10776.80	6667.51	88.31	6666.99	2.40	394940.88	1216308.27	N 48 2 29.51	W 103 34 32.71
	17207.00	90.04	89.62	10776.78	6699.51	88.56	6698.98	0.44	394939.84	1216340.25	N 48 2 29.51	W 103 34 32.24
	17269.00	88.90	89.93	10777.35	6761.50	88.80	6760.98	1.91	394937.58	1216402.20	N 48 2 29.51	W 103 34 31.33
	17300.00	88.90	90.15	10777.95	6792.50	88.78	6791.79	0.71	394936.31	1216433.17	N 48 2 29.51	W 103 34 30.87
	17394.00	88.90	90.10	10779.75	6886.47	88.58	6885.96	0.05	394933.92	1216527.06	N 48 2 29.51	W 103 34 29.49
	17426.00	88.81	90.14	10780.39	6918.46	88.51	6917.95	0.31	394930.97	1216559.02	N 48 2 29.51	W 103 34 29.02
	17488.00	89.87	90.71	10781.11	6980.45	88.05	6979.94	1.94	394928.01	1216620.94	N 48 2 29.51	W 103 34 28.11
	17583.00	89.60	90.07	10781.55	7075.44	87.40	7074.94	0.73	394923.54	1216715.83	N 48 2 29.51	W 103 34 26.71
	17677.00	90.31	89.60	10781.62	7169.43	87.67	7168.94	0.91	394920.02	1216809.76	N 48 2 29.51	W 103 34 25.32
	17771.00	89.87	89.51	10781.47	7263.43	88.40	7262.94	0.48	394916.96	1216903.70	N 48 2 29.51	W 103 34 23.94
	17865.00	90.40	89.39	10781.25	7307.43	89.31	73					

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 °")
	19290.00	89.69	89.09	10798.65	8781.73	87.37	8781.30	0.90	394854.76	1218420.70	N 48 2 29.49	W 103 34 1.60
	19385.00	89.78	88.87	10799.09	8876.73	89.06	8876.29	0.25	394852.62	1218515.66	N 48 2 29.51	W 103 34 0.20
	19479.00	89.87	88.67	10799.38	8970.72	91.08	8970.26	0.23	394850.85	1218609.64	N 48 2 29.53	W 103 33 58.82
	19573.00	89.87	88.14	10799.59	9064.70	93.70	9064.23	0.56	394849.68	1218703.63	N 48 2 29.55	W 103 33 57.43
	19668.00	88.81	88.38	10800.69	9159.67	96.58	9159.18	1.14	394848.74	1218798.61	N 48 2 29.58	W 103 33 56.04
	19762.00	88.64	88.15	10802.78	9253.63	99.43	9253.11	0.30	394847.80	1218892.58	N 48 2 29.61	W 103 33 54.65
	19856.00	90.13	88.44	10803.79	9347.60	102.22	9347.06	1.61	394846.81	1218986.56	N 48 2 29.64	W 103 33 53.27
	19950.00	90.04	88.02	10803.65	9441.58	105.13	9441.01	0.46	394845.92	1219080.55	N 48 2 29.68	W 103 33 51.89
	19981.00	89.34	88.98	10803.82	9472.57	105.94	9472.00	3.83	394845.48	1219111.54	N 48 2 29.67	W 103 33 51.43
	20044.00	88.81	89.26	10804.83	9535.56	106.91	9534.99	0.95	394843.91	1219174.51	N 48 2 29.68	W 103 33 50.51
	20139.00	87.14	89.73	10808.19	9630.50	107.74	9629.92	1.83	394840.92	1219269.39	N 48 2 29.69	W 103 33 49.11
	20234.00	89.08	88.06	10811.32	9725.43	109.57	9724.84	2.69	394938.93	1219364.30	N 48 2 29.71	W 103 33 47.71
	20328.00	90.31	89.23	10811.82	9819.42	111.80	9818.81	1.81	394837.37	1219458.28	N 48 2 29.73	W 103 33 46.33
Last ST2 Survey	20377.00	89.96	88.86	10811.71	9868.42	112.61	9867.81	1.04	394836.21	1219507.26	N 48 2 29.74	W 103 33 45.61
Projection to Bit	20450.00	89.96	88.86	10811.76	9941.41	114.07	9940.79	0.00	394834.72	1219580.24	N 48 2 29.75	W 103 33 44.53

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	32.000	1/98.425	30.000	30.000	SLB_MWD-STD-Depth Only	Original Hole / Wade Federal 5300 41-30 6B OH MWD 0' to
	1	32.000	32.000	Act Stns	30.000	30.000	SLB_MWD-STD-Depth Only	Original Hole / Wade Federal 5300 41-30 6B OH MWD 0' to
	1	32.000	13315.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Hole / Wade Federal 5300 41-30 6B OH MWD 0' to
	1	13315.000	14930.000	Act Stns	30.000	30.000	SLB_MWD-STD	5300 41-30 6B OH MWD 0' to ST1 / Wade Federal 5300 41-30
	1	14930.000	20377.000	Act Stns	30.000	30.000	SLB_MWD-STD	6B ST1 13315' to 15099' ST2 / Wade Federal 5300 41-30
	1	20377.000	20450.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	6B ST2 14930' to 20450' ST2 / Wade Federal 5300 41-30 6B ST2 14930' to 20450'

Industrial Commission of North Dakota
Oil and Gas Division

Well or Facility No

28425

Verbal Approval To Purchase and Transport Oil Tight Hole No

OPERATOR

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

WELL INFORMATION

Well Name WADE FEDERAL 5300 41-30 6B	Inspector Richard Dunn
Well Location QQ Sec Twp Rng LOT4 30 153 N 100 W	County MCKENZIE
Footages 910 Feet From the S Line 280 Feet From the W Line	Field BAKER
Date of First Production Through Permanent Wellhead 6/5/2015	Pool BAKKEN
This Is Not The First Sales	

PURCHASER / TRANSPORTER

TANK BATTERY

Central Tank Battery Number : 228394-01

SALES INFORMATION This Is Not The First Sales

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 6/5/2015
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
SFN 5749 (09-2006)

Well File No.

28976

28425

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 Spill Report Redrilling or Repair Shooting Casing or Liner Acidizing Plug Well Fracture Treatment Supplemental History Change Production Method Temporarily Abandon Reclamation Other

offsite pit

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
Water	Bbls
Gas	MCF

Name of Contractor(s)

Address

City

State

Zip Code

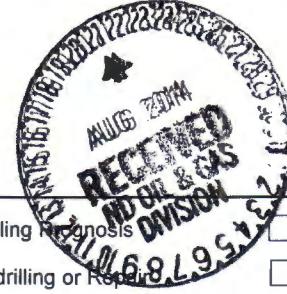
DETAILS OF WORK

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 	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 	
Title WNR	

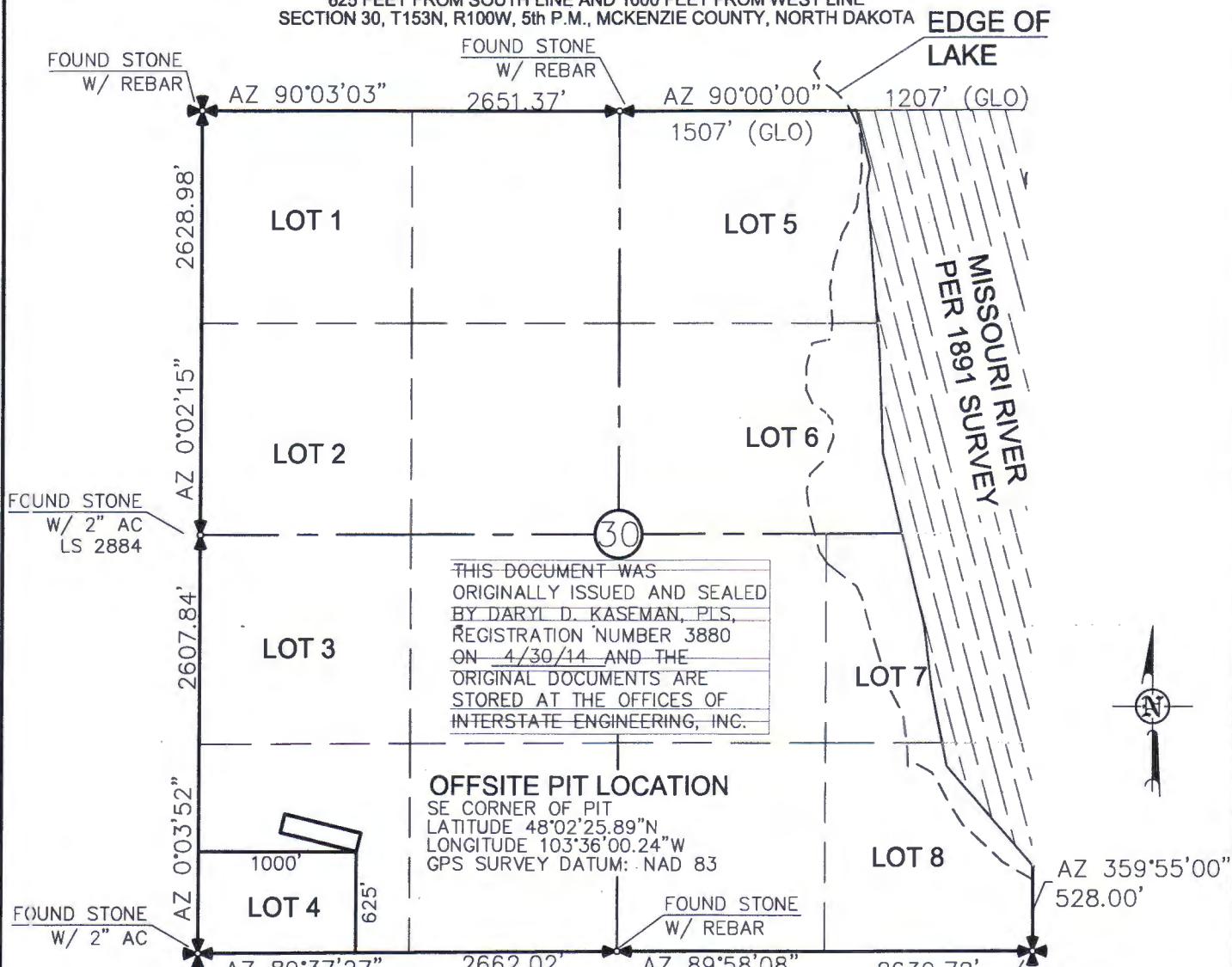
OFFSITE PIT LOCATION PLAT

OASIS PETROLEUM NORTH AMERICA, LLC

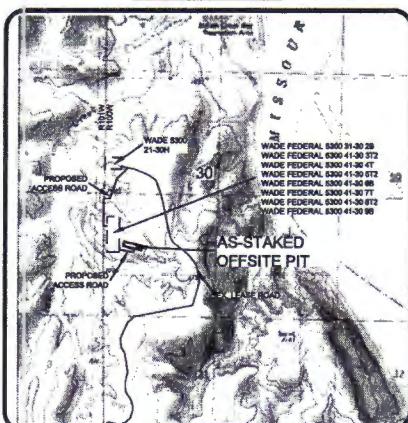
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"AS-STAKED OFFSITE PIT FOR WADE FEDERAL 5300 41-30 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



VICINITY MAP



DARYL D. KASEMAN LS-3880

(C) 2014, INTERSTATE ENGINEERING, INC.

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
OFFSITE PIT LOCATION PLAT
SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

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

Revision No.	Date	By	Description



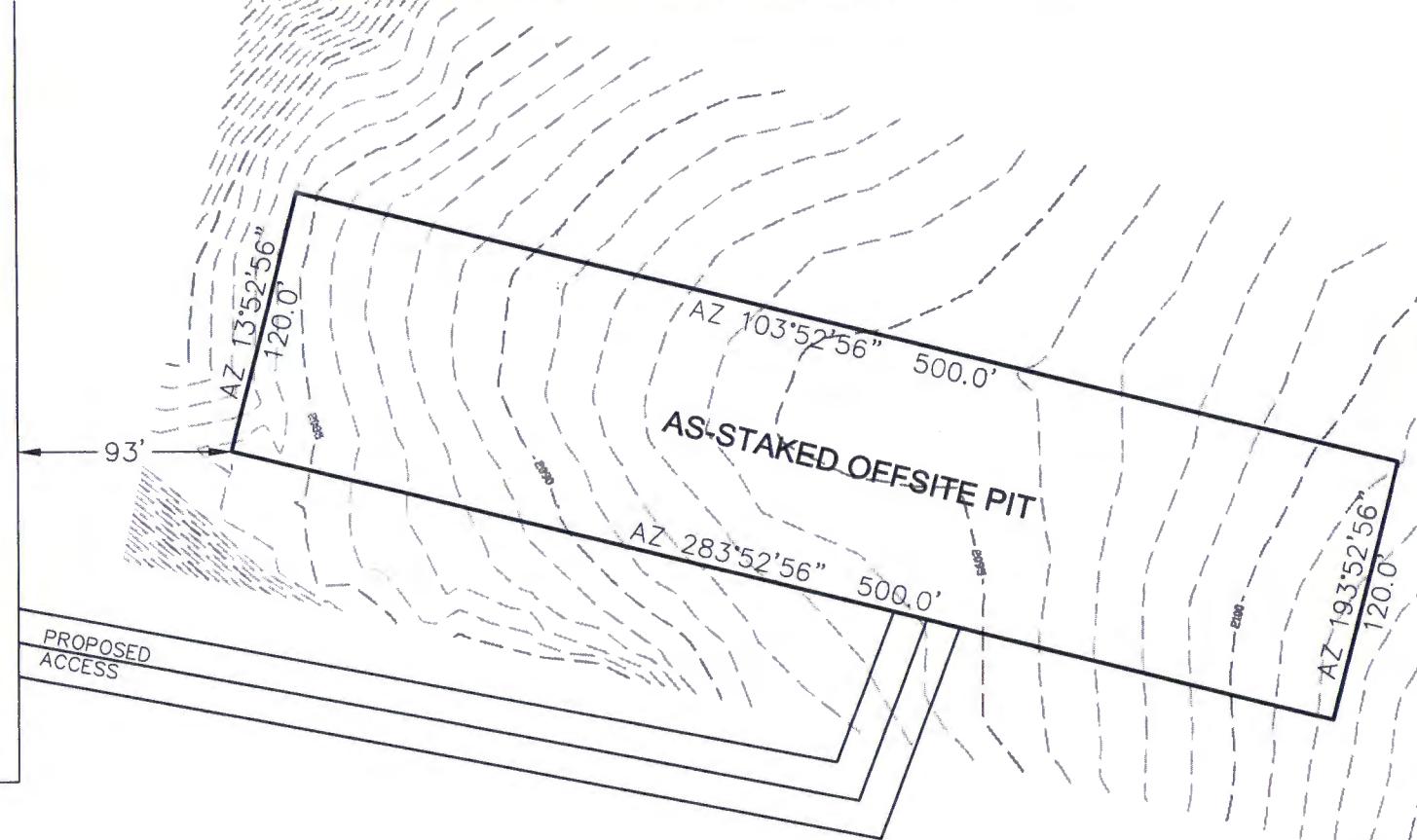
PAD LAYOUT

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,
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

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



THIS DOCUMENT WAS ORIGINALLY ISSUED
AND SEALED BY DARYL D. KASEMAN,
PLS, REGISTRATION NUMBER 3880 ON
4/30/14 AND THE ORIGINAL
DOCUMENTS ARE STORED AT THE
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INC.

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



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2/3

SHEET NO.

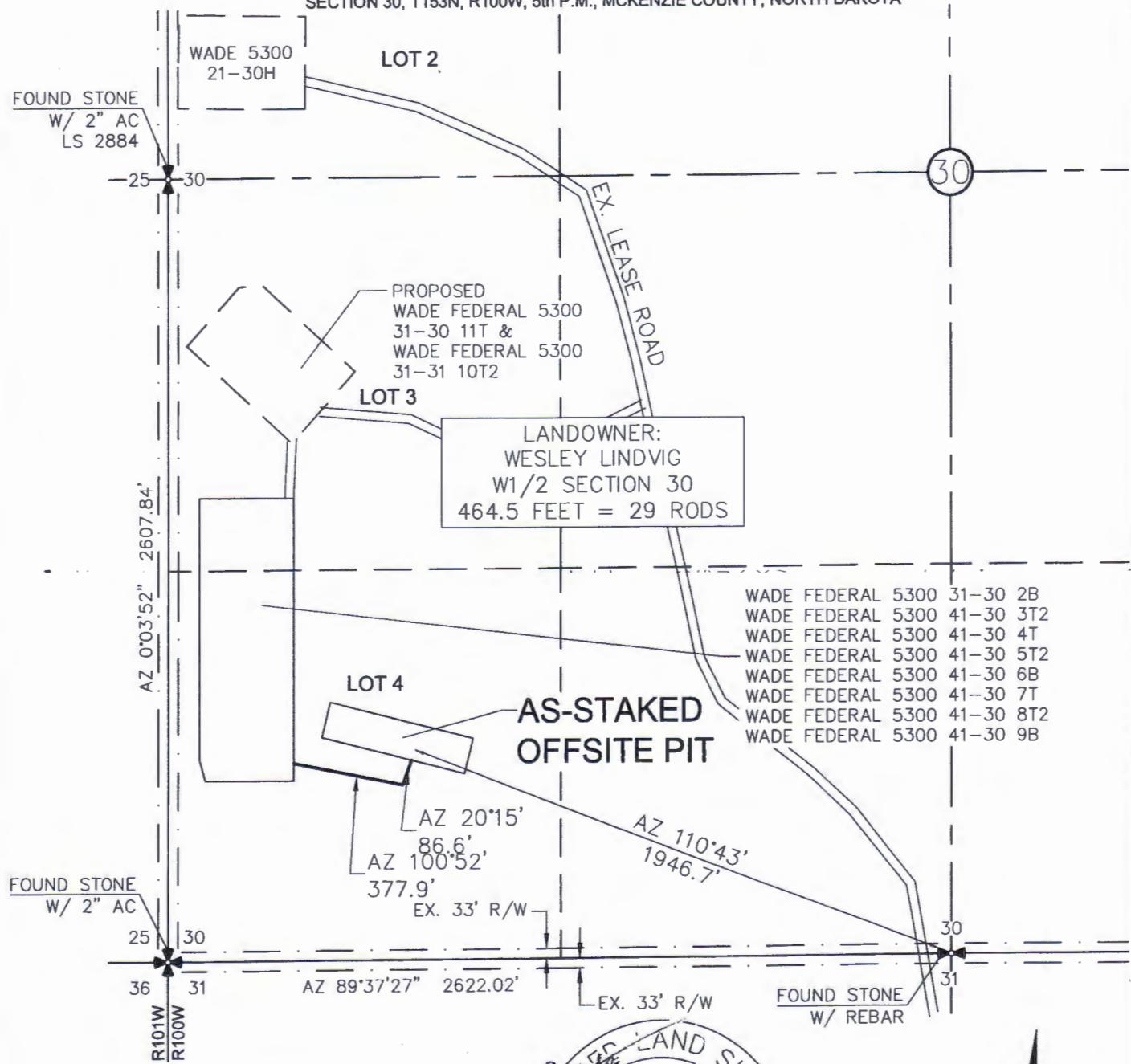
OASIS PETROLEUM NORTH AMERICA, LLC	
PAD LAYOUT	
SECTION 30, T153N, R100W	
MCKENZIE COUNTY, NORTH DAKOTA	
Project No.:	513-09-38109
Date:	APRIL 2014
Drawn By:	B.L.H.
Checked By:	D.J.K.
Other offices in Minnesota, North Dakota and South Dakota	

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

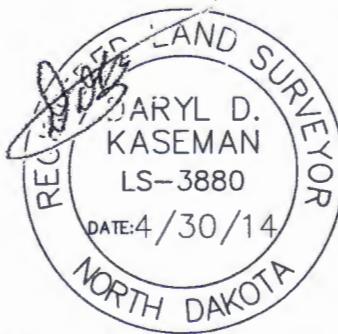
ACCESS APPROACH

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 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



THIS DOCUMENT WAS ORIGINALLY ISSUED AND SEALED BY DARYL D. KASEMAN, PLS, REGISTRATION NUMBER 3880 ON 4/30/14 AND THE ORIGINAL DOCUMENTS ARE STORED AT THE OFFICES OF INTERSTATE ENGINEERING, INC.



0 500
1" = 500'

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www.InterstateEng.com
Other offices in Minnesota, North Dakota and South Dakota

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

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

3/3
SHEET NO.

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Revision No.	Date	By	Description

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

By W.G.L.
Stu

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

ACKNOWLEDGMENT INDIVIDUAL

State of North Dakota)

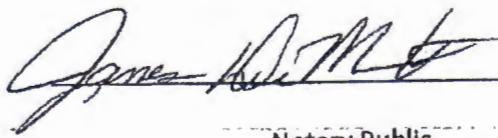
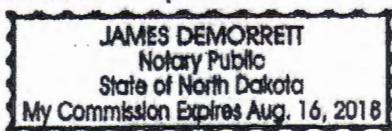
)

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 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 IntentApproximate 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 ppe**

**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
Water	Bbls	Water
Gas	MCF	Gas

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	

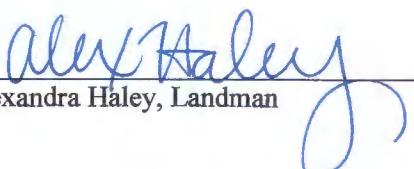
COMMINGLING AFFIDAVIT

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.

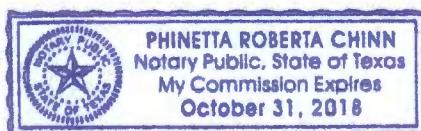
Dated this 22nd day of January, 2015

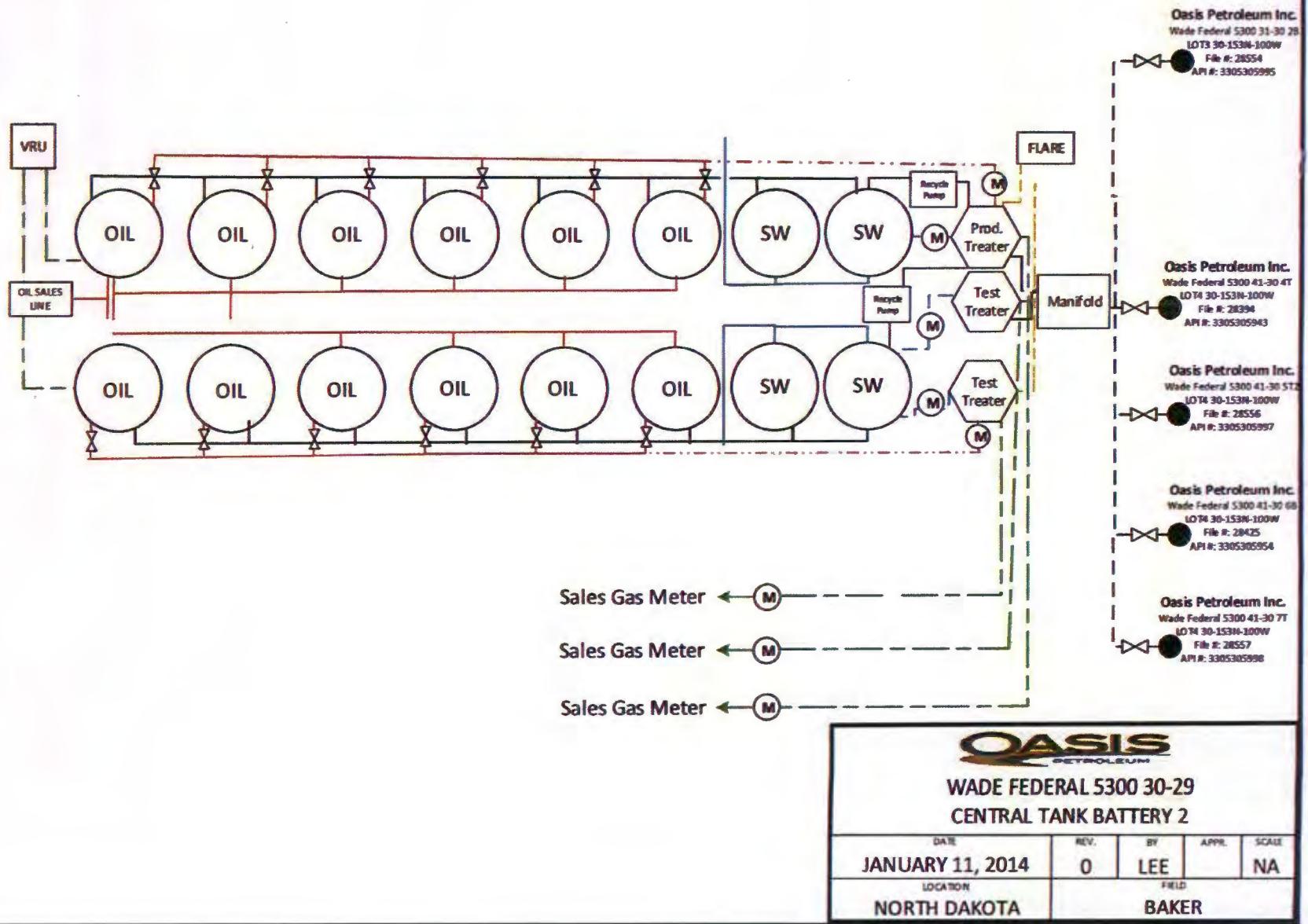

Alexandra Haley, Landman

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

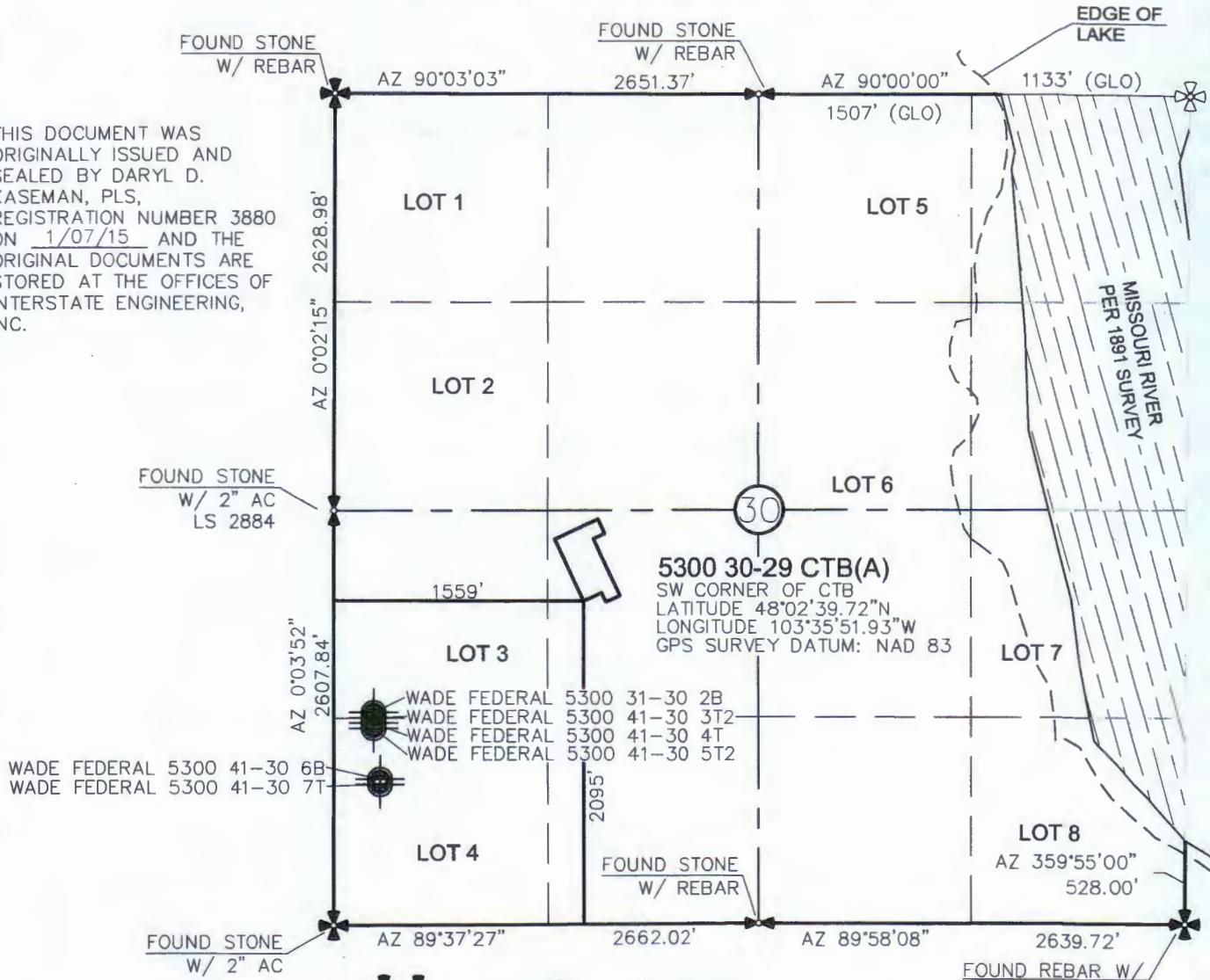




BATTERY LOCATION PLAT
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

"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

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1/5



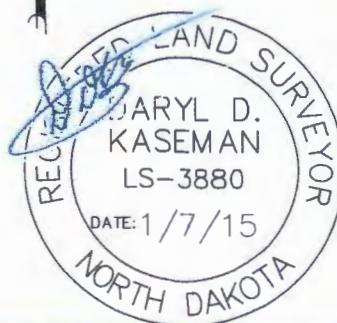
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425 East Main Street
Sidney, Montana 59270
Ph (406) 433-5617
Fax (406) 433-5618
www.interstateeng.com
Other offices in Minnesota, North Dakota and South Dakota

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

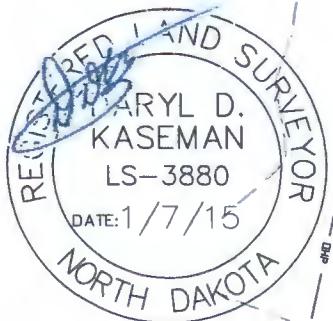
Drawn By:	J.J.S.	Project No.:	S15-09-003
Checked By:	D.D.K.	Date:	JAN 2015

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

2/5



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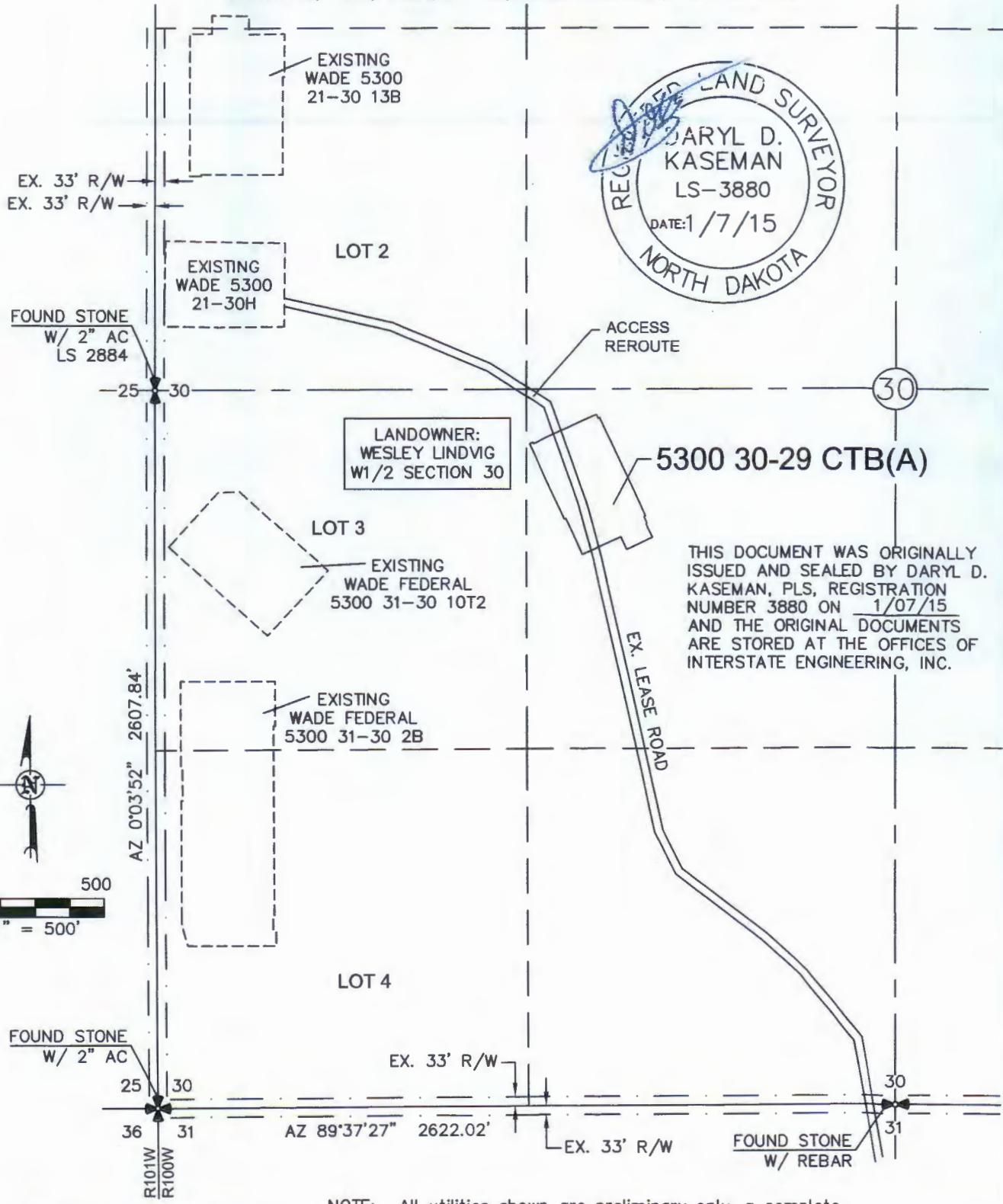
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OASIS PETROLEUM NORTH AMERICA, LLC
PAD LAYOUT
SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

Revision No.	Date	By	Description

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



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

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3/5



SHEET NO.

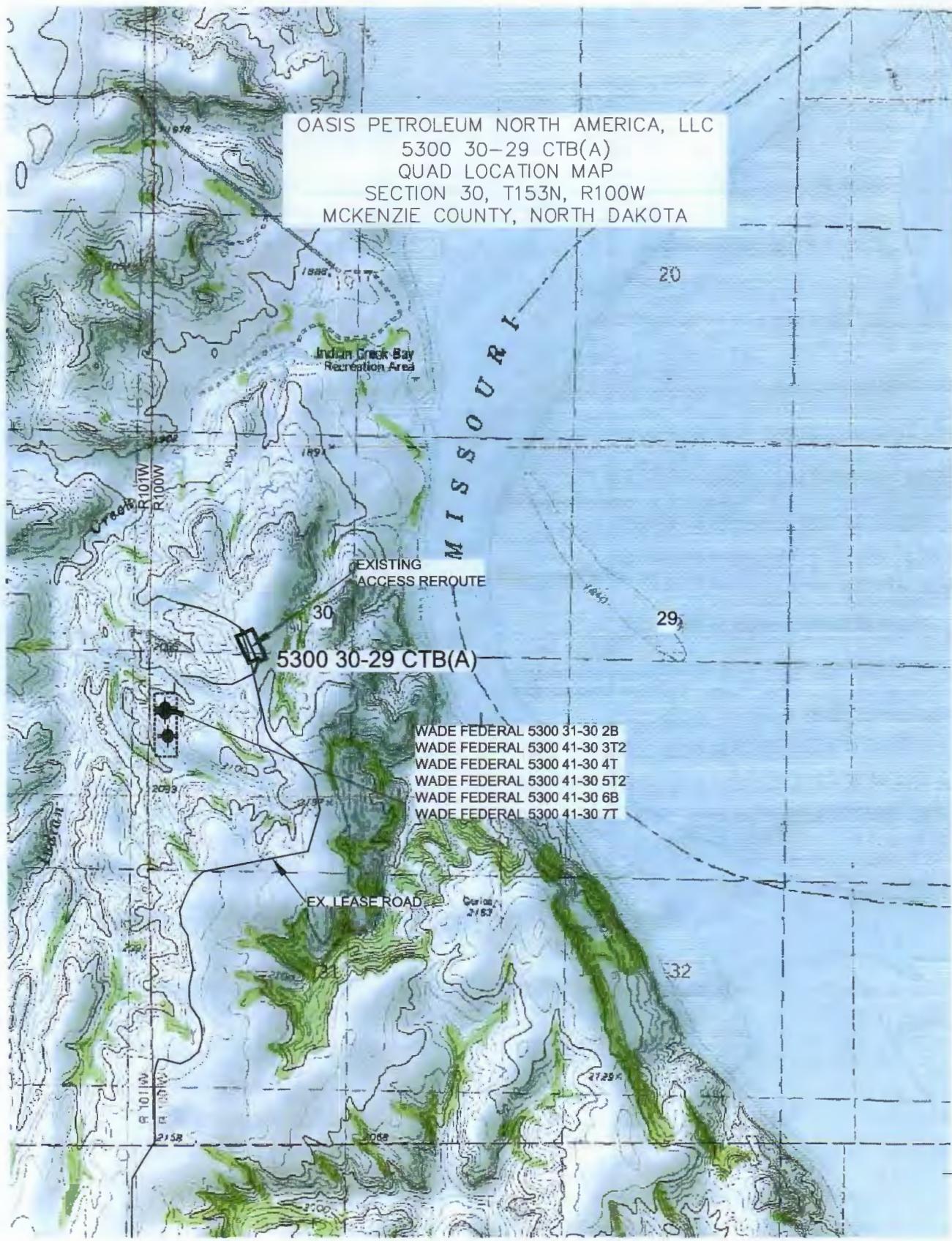
Interstate Engineering, Inc.
P.O. Box 648
425 East Main Street
Sidney, Montana 59270
Ph (406) 433-5617
Fax (406) 433-5618
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Other offices in Minnesota, North Dakota and South Dakota

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

Revision No.	Date	By	Description

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



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Fax (406) 433-5618
www.interstateeng.com

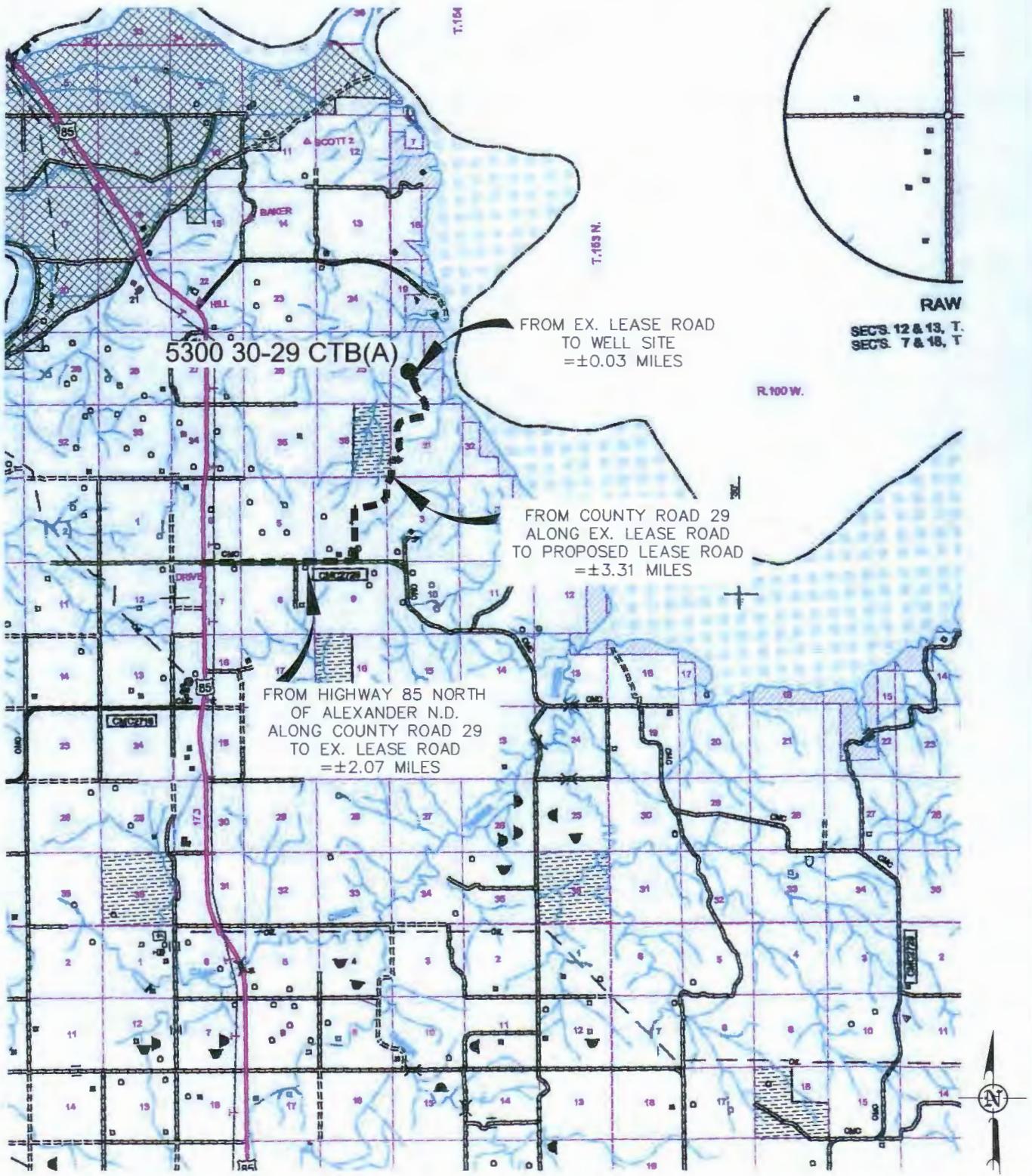
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC
QUAD LOCATION MAP
SECTION 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
Ph (406) 433-5617
Fax (406) 433-5618
www.interstateeng.com

Digitized by srujanika@gmail.com

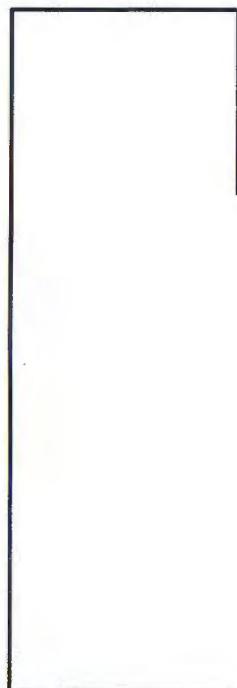
OASIS PETROLEUM NORTH AMERICA, LLC
COUNTY ROAD MAP
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

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

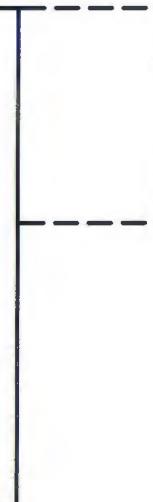
Drawn By: J.J.S. Project No.: S15-09-003

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)

TH

Well File No.
28425



PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date December 9, 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 type="checkbox"/> Other	Waiver from tubing/packer requirement

Well Name and Number
Wade Federal 5300 41-30 6B

Lot 4

Footages	Qtr-Qtr	Section	Township	Range
910 F S L	280 F W L	SWSW	30	153 N 100 W
Field Baker	Pool Bakken	County McKenzie		

24-HOUR PRODUCTION RATE

Before	After
Oil	Bbls
Water	Bbls
Gas	MCF

Name of Contractor(s)

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

DETAILS OF WORK

Oasis Petroleum North America LLC 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 Assistant	Date December 9, 2014	
Email Address jswenson@oasispetroleum.com		

FOR STATE USE ONLY

<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date <i>December 11, 2014</i>	
By <i>J. M. L.</i>	
Title PETROLEUM ENGINEER	



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.
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28394
28405
28554
Well File No
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 	

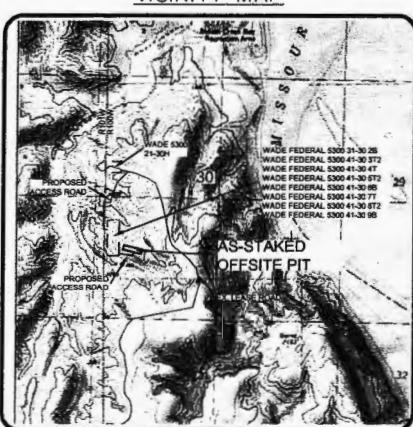
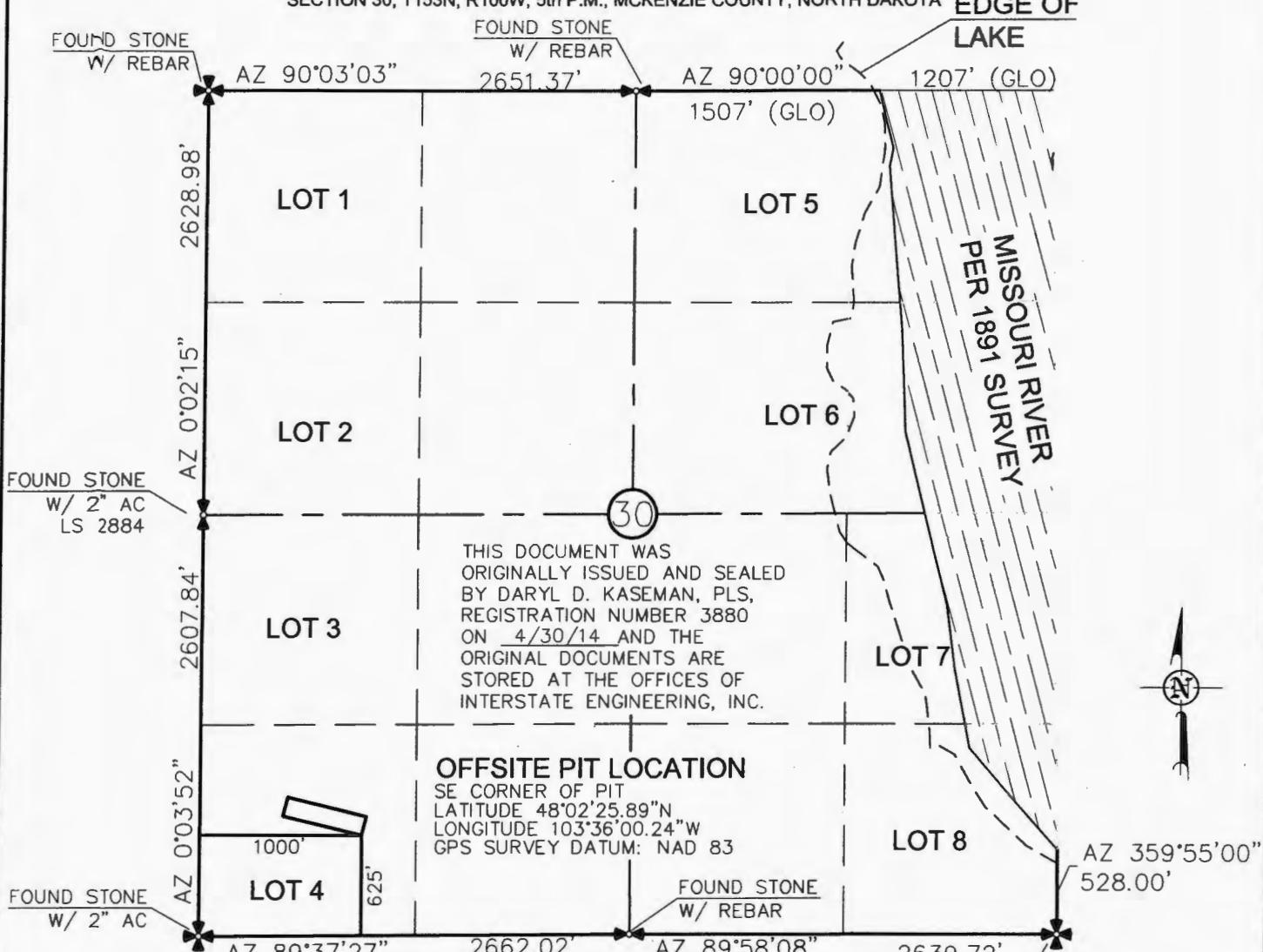
OFFSITE PIT LOCATION PLAT

OASIS PETROLEUM NORTH AMERICA, LLC

1991 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 EDGE

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



DARYL D. KASEMAN LS-3880

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.

A circular stamp with the following text:
RECEIVED
JAYRL D.
KASEMAN
LS-3880
DATE: 4/30/14
NORTH DAKOTA

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1/3



SHEET NO.

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P.O. Box 648
425 East Main Street
Sidney, Montana 59270
Ph (406) 433-5617
Fax (406) 433-5618
www.interstaeng.com

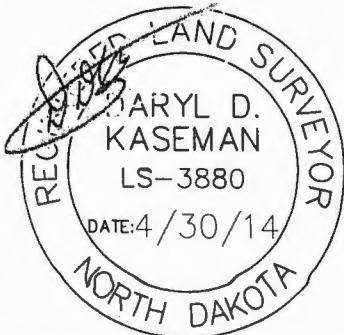
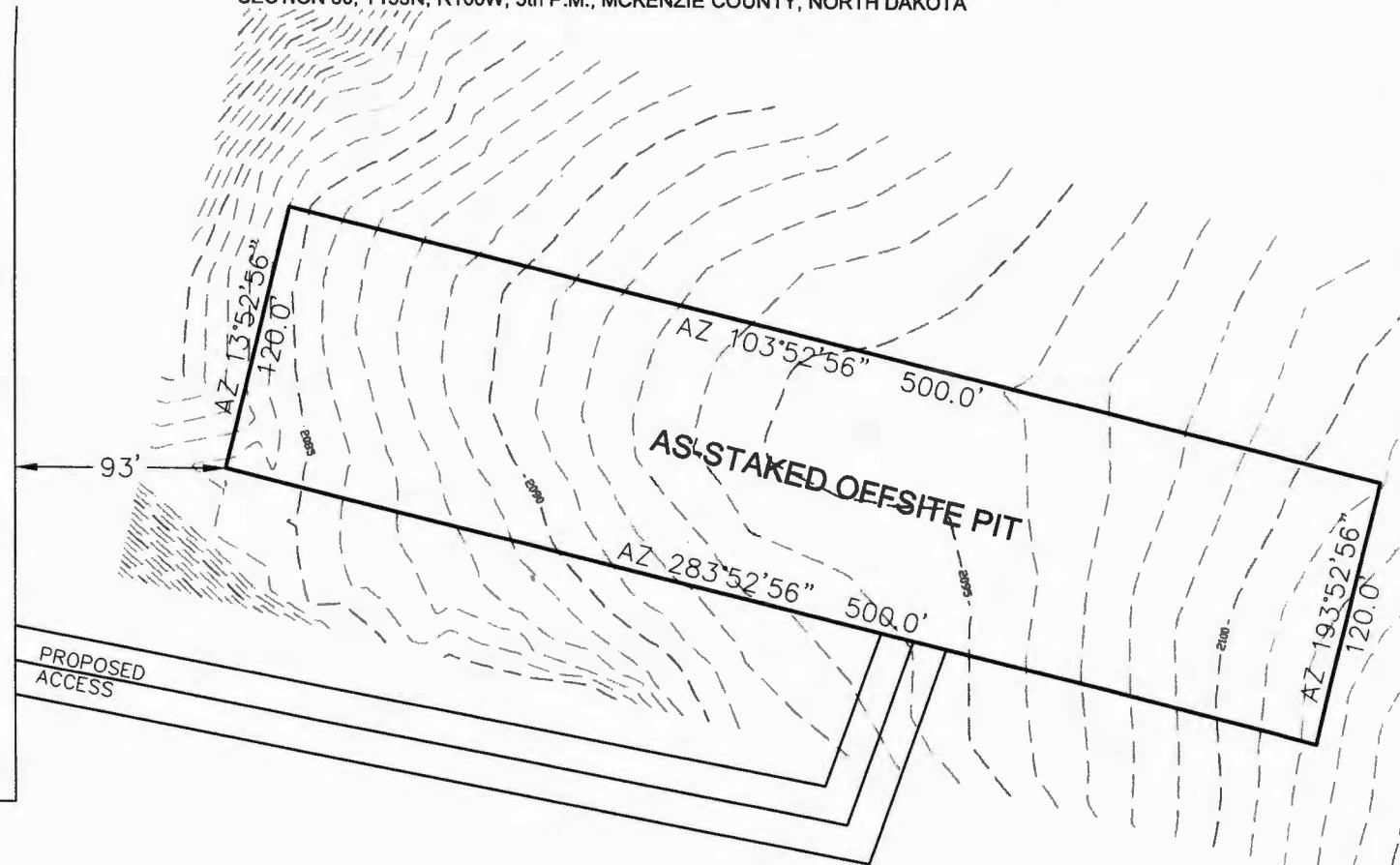
OASIS PETROLEUM NORTH AMERICA, LLC
OFFSITE PIT LOCATION PLAT
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA

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,
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

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



THIS DOCUMENT WAS ORIGINALLY ISSUED
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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.

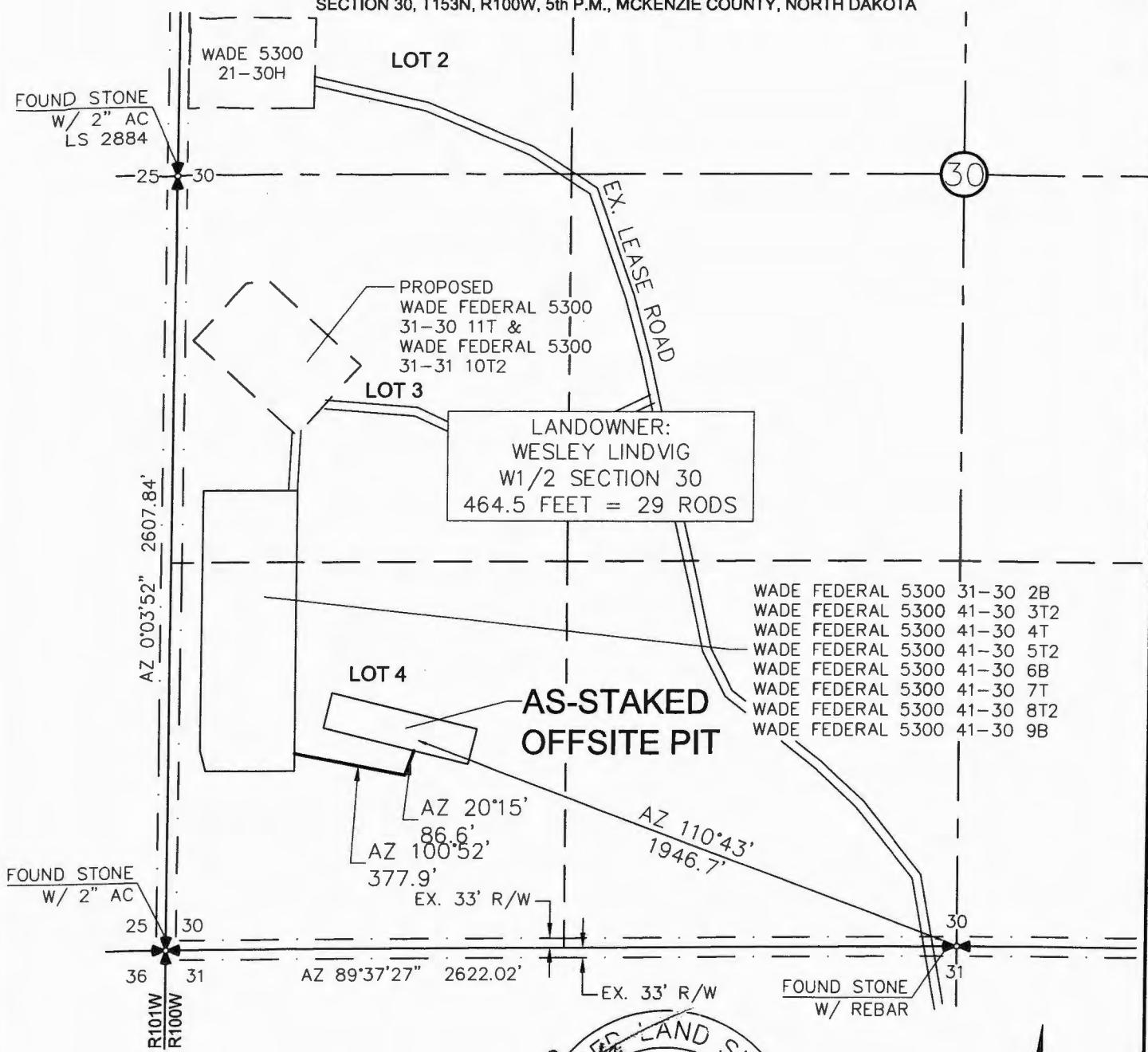
OASIS PETROLEUM NORTH AMERICA, LLC	Section No.	Date	By	Description
PAD LAYOUT				
SECTION 30, T153N, R100W				
MCKENZIE COUNTY, NORTH DAKOTA				
Project No.: S15-053-0109				
Drawn By: B.H.H.	APRIL 2014			
Checked By: D.D.K.				

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425 East Main Street
Sidney, Montana 59270
Ph (406) 433-5617
Fax (406) 433-5618
www.interstateeng.com
Other offices in Missoula, North Dakota, and South Dakota

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 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



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

Revision No.	Date	By	Description



SUNDRY NOTICES AND REPORTS ON WELLS - FORM

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



Well File No.
28425

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

<input checked="" type="checkbox"/> Notice of Intent	Approximate Start Date December 11, 2014
<input type="checkbox"/> Report of Work Done	Date Work Completed
<input type="checkbox"/> Notice of Intent to Begin a Workover Project that may Qualify for a Tax Exemption Pursuant to NDCC Section 57-51.1-03.	
Approximate Start Date	

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

Well Name and Number
Wade Federal 5300 41-30 6B

Lot 4

Footages	Qtr-Qtr	Section	Township	Range
910 F S L	280 F W L	SW SW	30	153 N 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 immediately, we request CONFIDENTIAL STATUS for the above referenced well.

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 Assistant	Date December 11, 2014	
Email Address jswenson@oasispetroleum.com		

FOR STATE USE ONLY	
<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date 12/16/14	
By 	
Title Engineering Technician	



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.
28425

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.
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Notice of Intent

Approximate Start Date
September 1, 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 Prognosis

Spill Report

Redrilling or Repair

Shooting

Casing or Liner

Acidizing

Plug Well

Fracture Treatment

Supplemental History

Change Production Method

Temporarily Abandon

Reclamation

Other

Well Name and Number

Wade Federal 5300 41-30 6B

Footages

910

F

S

L

280

F

W

L

Qtr-Qtr

Section

Township

Range

SWSW

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 respectfully requests to revise the casing plan for the subject well as follows:

13 3/8" 54.5# surface casing will be ran to 2,050'

Contingency 9 5/8" 40# will be ran to 6,400' in order to isolate the Dakota

7" 32# intermediate casing will be ran to 10,990'

4.5" 13.5# liner will be ran to 20,526'

Attached is a revised drill plan, directional plan/plot and well summary.

Company Oasis Petroleum North America LLC		Telephone Number 281-404-9491
Address 1001 Fannin, Suite 1500		
City Houston	State TX	Zip Code 77002
Signature <i>Brandi Terry</i>	Printed Name Brandi Terry	
Title Regulatory Specialist	Date July 30, 2014	
Email Address bterry@oasispetroleum.com		

FOR STATE USE ONLY

Received

Approved

Date

8-18-14

By

Athanne Eubel
Petroleum Resource Specialist

Oasis Petroleum
Well Summary
Wade Federal 5300 41-30 6B
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 2,050'	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 2,050'	13-3/8", 54.5#, J-55, STC, 8rd	1130 / 1.18	2730 / 2.84	514 / 2.62

API Rating & Safety Factor

- a) Based on full casing evacuation with 9 ppg fluid on backside (2,050' setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside (2,050' setting depth).
- c) Based on string weight in 9 ppg fluid at 2,050' TVD plus 100k# overpull. (Buoyed weight equals 96k lbs.)

Cement volumes are based on 13-3/8" casing set in 17-1/2" hole with 50% excess to circulate cement back to surface.
Mix and pump the following slurry.

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

Lead Slurry: **596 sks** (308 bbls) 2.9 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: **349 sks** (72 bbls) 1.16 yield conventional system with 94 lb/sk cement, .25% CaCl₂ and 0.25 lb/sk Lost Circulation Control Agent

**Oasis Petroleum
Well Summary
Wade Federal 5300 41-30 6B
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 buoyed 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
Well Summary**
Wade Federal 5300 41-30 6B
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' – 10,990'	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' – 10,990'	10,988'	7", 32#, HCP-110, LTC, 8rd	11820 / 2.12*	12460 / 1.29	897 / 2.30
6,696' – 10,224'	3,528'	7", 32#, HCP-110, LTC, 8rd	11820 / 1.43*	12460 / 1.29	

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 10,702' TVD.
- c) Based on string weight in 10 ppg fluid, (290k 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: **188 sks** (86 bbls) 2.55 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: **598 sks** (165 bbls) 1.55 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
Well Summary
Wade Federal 5300 41-30 6B
Section 30 T153N R100W
McKenzie County, ND

PRODUCTION LINER

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Estimated Torque
4-1/2"	10,174' – 20,526'	13.5	P-110	BTC	3.92"	3.795"	4,500

Interval	Description	Collapse	Burst	Tension
		(psi) a	(psi) b	(1000 lbs) c
10,174' – 20,526'	4-1/2", 13.5 lb, P-110, BTC, 8rd	10670 / 2.00	12410 / 1.28	443 / 1.97

API Rating & Safety Factor

- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10,759' TVD.
 Burst pressure based on 9000 psi treating pressure with 10.2 ppg internal fluid gradient and 9 ppg external
- b) fluid gradient @ 10,759' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 125k lbs.) plus 100k lbs overpull.

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)

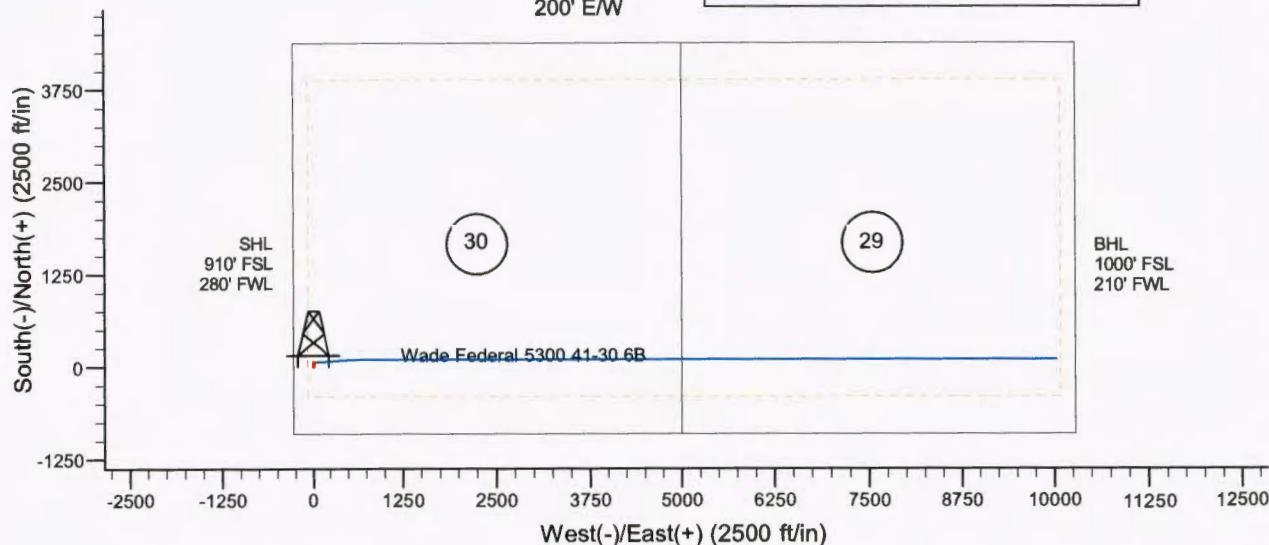
Azimuths to True North
 Magnetic North: 8.18°

 Magnetic Field Strength: 56488.6nT
 Dip Angle: 72.95°
 Date: 1/28/2014
 Model: IGRF200510

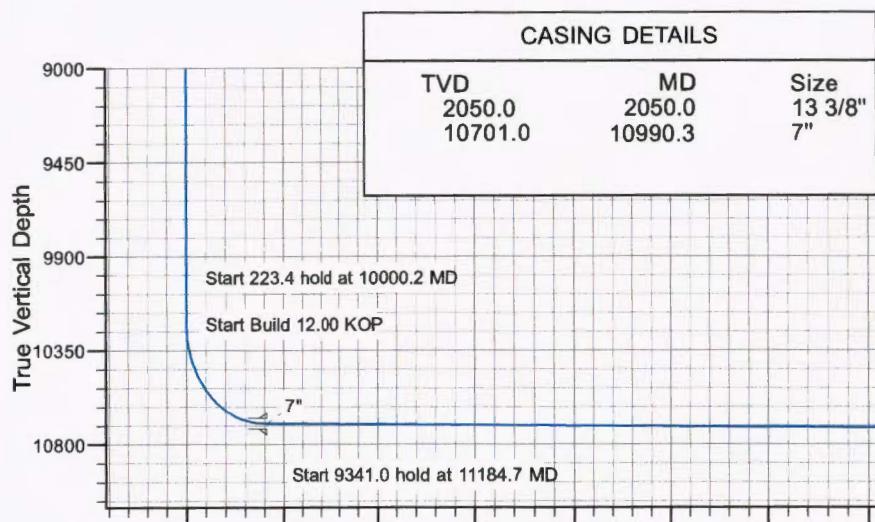
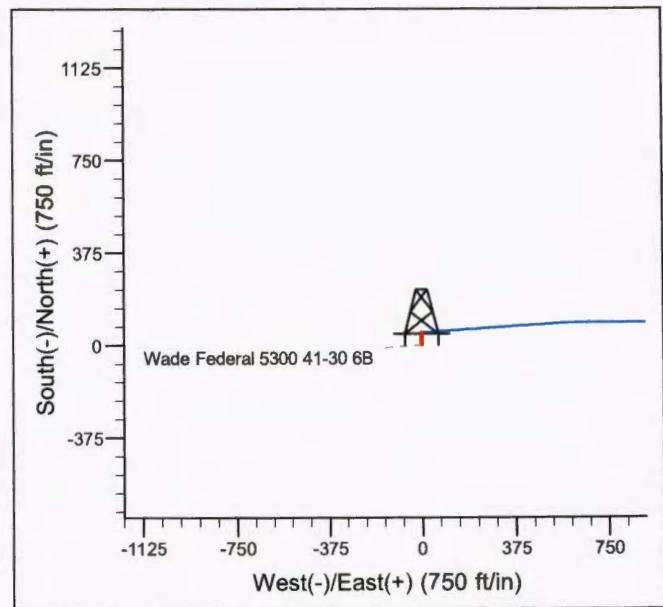


Project: Indian Hills
 Site: 153N-100W-29/30
 Well: Wade Federal 5300 41-30 6B
 Wellbore: Wade Federal 5300 41-30 6B
 Design: Design #1

Setbacks
 500' N/S
 200' E/W



SITE DETAILS: 153N-100W-29/30	
Site Centre Latitude:	48° 2' 28.650 N
Longitude:	103° 36' 10.82 W
Positional Uncertainty:	0.0
Convergence:	-2.31
Local North:	True



MD	Inc	Azi	TVD	+N-S	+E-W	Dleg
0.0	0.00	0.00	0.0	0.0	0.0	0.00
2050.0	0.00	0.00	2050.0	0.0	0.0	0.00
2060.0	0.50	0.00	2060.0	0.0	0.0	5.00
7779.7	0.50	0.00	7779.4	50.0	0.0	0.00
7789.7	0.00	0.00	7789.4	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	86.11	10700.9	82.2	473.5	12.00
10990.3	89.65	86.11	10701.0	83.5	493.0	0.00
11184.7	89.65	90.00	10702.2	90.1	687.2	2.00
20525.6	89.65	90.00	10759.1	90.1	10028.0	0.00

Vertical Section at 89.49°

Oasis

Indian Hills

153N-100W-29/30

Wade Federal 5300 41-30 6B

Wade Federal 5300 41-30 6B

Plan: Design #1

Standard Planning Report

19 May, 2014

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B							
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 41-30 6B	Survey Calculation Method:	Minimum Curvature							
Wellbore:	Wade Federal 5300 41-30 6B									
Design:	Design #1									
Project	Indian Hills									
Map System:	US State Plane 1983	System Datum:	Mean Sea Level							
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 41-30 6B									
Well Position	+N/S +E/W	-398.2 ft 40.1 ft	Northing: 395,121.92 ft Easting: 1,209,645.66 ft							
Position Uncertainty	0.0 ft		Latitude: 48° 2' 28.650 N Longitude: 103° 36' 10.820 W							
			Wellhead Elevation: Ground Level: 2,045.0 ft							
Wellbore	Wade Federal 5300 41-30 6B									
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)					
	IGRF200510	1/28/2014	8.18	72.95	56,489					
Design	Design #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	89.49					
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
2,050.0	0.00	0.00	2,050.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,060.0	0.50	0.00	2,060.0	0.0	0.0	5.00	5.00	0.00	0.00	0.00
7,779.7	0.50	0.00	7,779.4	50.0	0.0	0.00	0.00	0.00	0.00	0.00
7,789.7	0.00	0.00	7,789.4	50.0	0.0	5.00	-5.00	0.00	180.00	0.00
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	86.11	10,700.9	82.2	473.5	12.00	12.00	0.00	86.11	
10,990.3	89.65	86.11	10,701.0	83.5	493.0	0.00	0.00	0.00	0.00	
11,184.7	89.65	90.00	10,702.2	90.1	687.2	2.00	0.00	2.00	90.00	
20,525.6	89.65	90.00	10,759.1	90.1	10,028.0	0.00	0.00	0.00	0.00	

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
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	
2,020.0	0.00	0.00	2,020.0	0.0	0.0	0.0	0.00	0.00	0.00	
Start Build 5.00										
2,030.0	0.00	0.00	2,030.0	0.0	0.0	0.0	0.00	0.00	0.00	
Start 5719.7 hold at 2030.0 MD										
2,050.0	0.00	0.00	2,050.0	0.0	0.0	0.0	0.00	0.00	0.00	
9 5/8"										
2,060.0	0.50	0.00	2,060.0	0.0	0.0	0.0	5.00	5.00	0.00	
2,100.0	0.50	0.00	2,100.0	0.4	0.0	0.0	0.00	0.00	0.00	
2,200.0	0.50	0.00	2,200.0	1.3	0.0	0.0	0.00	0.00	0.00	
2,300.0	0.50	0.00	2,300.0	2.1	0.0	0.0	0.00	0.00	0.00	
2,400.0	0.50	0.00	2,400.0	3.0	0.0	0.0	0.00	0.00	0.00	
2,500.0	0.50	0.00	2,500.0	3.9	0.0	0.0	0.00	0.00	0.00	
2,600.0	0.50	0.00	2,600.0	4.8	0.0	0.0	0.00	0.00	0.00	
2,700.0	0.50	0.00	2,700.0	5.6	0.0	0.1	0.00	0.00	0.00	
2,800.0	0.50	0.00	2,800.0	6.5	0.0	0.1	0.00	0.00	0.00	
2,900.0	0.50	0.00	2,900.0	7.4	0.0	0.1	0.00	0.00	0.00	
3,000.0	0.50	0.00	3,000.0	8.2	0.0	0.1	0.00	0.00	0.00	
3,100.0	0.50	0.00	3,100.0	9.1	0.0	0.1	0.00	0.00	0.00	
3,200.0	0.50	0.00	3,200.0	10.0	0.0	0.1	0.00	0.00	0.00	
3,300.0	0.50	0.00	3,300.0	10.9	0.0	0.1	0.00	0.00	0.00	
3,400.0	0.50	0.00	3,399.9	11.7	0.0	0.1	0.00	0.00	0.00	
3,500.0	0.50	0.00	3,499.9	12.6	0.0	0.1	0.00	0.00	0.00	
3,600.0	0.50	0.00	3,599.9	13.5	0.0	0.1	0.00	0.00	0.00	
3,700.0	0.50	0.00	3,699.9	14.4	0.0	0.1	0.00	0.00	0.00	
3,800.0	0.50	0.00	3,799.9	15.2	0.0	0.1	0.00	0.00	0.00	
3,900.0	0.50	0.00	3,899.9	16.1	0.0	0.1	0.00	0.00	0.00	
4,000.0	0.50	0.00	3,999.9	17.0	0.0	0.2	0.00	0.00	0.00	
4,100.0	0.50	0.00	4,099.9	17.8	0.0	0.2	0.00	0.00	0.00	
4,200.0	0.50	0.00	4,199.9	18.7	0.0	0.2	0.00	0.00	0.00	
4,300.0	0.50	0.00	4,299.9	19.6	0.0	0.2	0.00	0.00	0.00	
4,400.0	0.50	0.00	4,399.9	20.5	0.0	0.2	0.00	0.00	0.00	
4,500.0	0.50	0.00	4,499.9	21.3	0.0	0.2	0.00	0.00	0.00	

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,566.1	0.50	0.00	4,566.0	21.9	0.0	0.2	0.00	0.00	0.00	
Greenhorn										
4,600.0	0.50	0.00	4,599.9	22.2	0.0	0.2	0.00	0.00	0.00	
4,700.0	0.50	0.00	4,699.9	23.1	0.0	0.2	0.00	0.00	0.00	
4,800.0	0.50	0.00	4,799.9	24.0	0.0	0.2	0.00	0.00	0.00	
4,900.0	0.50	0.00	4,899.9	24.8	0.0	0.2	0.00	0.00	0.00	
4,969.1	0.50	0.00	4,969.0	25.4	0.0	0.2	0.00	0.00	0.00	
Mowry										
5,000.0	0.50	0.00	4,999.9	25.7	0.0	0.2	0.00	0.00	0.00	
5,100.0	0.50	0.00	5,099.9	26.6	0.0	0.2	0.00	0.00	0.00	
5,200.0	0.50	0.00	5,199.9	27.4	0.0	0.2	0.00	0.00	0.00	
5,300.0	0.50	0.00	5,299.9	28.3	0.0	0.3	0.00	0.00	0.00	
5,391.1	0.50	0.00	5,391.0	29.1	0.0	0.3	0.00	0.00	0.00	
Dakota										
5,400.0	0.50	0.00	5,399.9	29.2	0.0	0.3	0.00	0.00	0.00	
5,500.0	0.50	0.00	5,499.9	30.1	0.0	0.3	0.00	0.00	0.00	
5,600.0	0.50	0.00	5,599.9	30.9	0.0	0.3	0.00	0.00	0.00	
5,700.0	0.50	0.00	5,699.9	31.8	0.0	0.3	0.00	0.00	0.00	
5,800.0	0.50	0.00	5,799.9	32.7	0.0	0.3	0.00	0.00	0.00	
5,900.0	0.50	0.00	5,899.9	33.6	0.0	0.3	0.00	0.00	0.00	
6,000.0	0.50	0.00	5,999.8	34.4	0.0	0.3	0.00	0.00	0.00	
6,100.0	0.50	0.00	6,099.8	35.3	0.0	0.3	0.00	0.00	0.00	
6,200.0	0.50	0.00	6,199.8	36.2	0.0	0.3	0.00	0.00	0.00	
6,300.0	0.50	0.00	6,299.8	37.0	0.0	0.3	0.00	0.00	0.00	
6,400.0	0.50	0.00	6,399.8	37.9	0.0	0.3	0.00	0.00	0.00	
6,407.2	0.50	0.00	6,407.0	38.0	0.0	0.3	0.00	0.00	0.00	
Rierdon										
6,500.0	0.50	0.00	6,499.8	38.8	0.0	0.3	0.00	0.00	0.00	
6,600.0	0.50	0.00	6,599.8	39.7	0.0	0.4	0.00	0.00	0.00	
6,700.0	0.50	0.00	6,699.8	40.5	0.0	0.4	0.00	0.00	0.00	
6,800.0	0.50	0.00	6,799.8	41.4	0.0	0.4	0.00	0.00	0.00	
6,896.2	0.50	0.00	6,896.0	42.2	0.0	0.4	0.00	0.00	0.00	
Dunham Salt										
6,900.0	0.50	0.00	6,899.8	42.3	0.0	0.4	0.00	0.00	0.00	
6,942.2	0.50	0.00	6,942.0	42.6	0.0	0.4	0.00	0.00	0.00	
Dunham Salt Base										
7,000.0	0.50	0.00	6,999.8	43.2	0.0	0.4	0.00	0.00	0.00	
7,100.0	0.50	0.00	7,099.8	44.0	0.0	0.4	0.00	0.00	0.00	
7,200.0	0.50	0.00	7,199.8	44.9	0.0	0.4	0.00	0.00	0.00	
7,205.2	0.50	0.00	7,205.0	44.9	0.0	0.4	0.00	0.00	0.00	
Pine Salt										
7,229.2	0.50	0.00	7,229.0	45.2	0.0	0.4	0.00	0.00	0.00	
Pine Salt Base										
7,291.2	0.50	0.00	7,291.0	45.7	0.0	0.4	0.00	0.00	0.00	
Opelche Salt										
7,300.0	0.50	0.00	7,299.8	45.8	0.0	0.4	0.00	0.00	0.00	
7,371.2	0.50	0.00	7,371.0	46.4	0.0	0.4	0.00	0.00	0.00	
Opelche Salt Base										
7,400.0	0.50	0.00	7,399.8	46.6	0.0	0.4	0.00	0.00	0.00	
7,500.0	0.50	0.00	7,499.8	47.5	0.0	0.4	0.00	0.00	0.00	
7,600.0	0.50	0.00	7,599.8	48.4	0.0	0.4	0.00	0.00	0.00	
7,615.2	0.50	0.00	7,615.0	48.5	0.0	0.4	0.00	0.00	0.00	
Amstden										
7,700.0	0.50	0.00	7,699.8	49.3	0.0	0.4	0.00	0.00	0.00	

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)	
7,749.7	0.50	0.00	7,749.4	49.7	0.0	0.4	0.00	0.00	0.00	
Start Drop -5.00										
7,759.7	0.50	0.00	7,759.4	49.8	0.0	0.4	0.00	0.00	0.00	
Start 2240.6 hold at 7759.7 MD										
7,771.2	0.50	0.00	7,771.0	49.9	0.0	0.4	0.00	0.00	0.00	
Tyler										
7,779.7	0.50	0.00	7,779.4	50.0	0.0	0.4	0.00	0.00	0.00	
7,789.7	0.00	0.00	7,789.4	50.0	0.0	0.4	5.00	-5.00	0.00	
7,800.0	0.00	0.00	7,799.8	50.0	0.0	0.4	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,899.8	50.0	0.0	0.4	0.00	0.00	0.00	
7,994.2	0.00	0.00	7,994.0	50.0	0.0	0.4	0.00	0.00	0.00	
Otter/Base Minnelusa										
8,000.0	0.00	0.00	7,999.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,099.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,199.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,299.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,336.2	0.00	0.00	8,336.0	50.0	0.0	0.4	0.00	0.00	0.00	
Kibbey Lime										
8,400.0	0.00	0.00	8,399.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,484.2	0.00	0.00	8,484.0	50.0	0.0	0.4	0.00	0.00	0.00	
Charles Salt										
8,500.0	0.00	0.00	8,499.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,599.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,699.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,799.8	50.0	0.0	0.4	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,899.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,999.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,099.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,163.2	0.00	0.00	9,163.0	50.0	0.0	0.4	0.00	0.00	0.00	
Base Last Salt										
9,200.0	0.00	0.00	9,199.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,299.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,377.2	0.00	0.00	9,377.0	50.0	0.0	0.4	0.00	0.00	0.00	
Mission Canyon										
9,400.0	0.00	0.00	9,399.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,499.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,599.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,699.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,799.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,899.8	50.0	0.0	0.4	0.00	0.00	0.00	
9,926.2	0.00	0.00	9,926.0	50.0	0.0	0.4	0.00	0.00	0.00	
Lodgepole										
10,000.2	0.00	0.00	10,000.0	50.0	0.0	0.4	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	0.4	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,199.8	50.0	0.0	0.4	0.00	0.00	0.00	
10,223.6	0.00	0.00	10,223.4	50.0	0.0	0.4	0.00	0.00	0.00	
Start Build 12.00 KOP										
10,225.0	0.16	86.11	10,224.8	50.0	0.0	0.5	12.00	12.00	0.00	
10,250.0	3.16	86.11	10,249.8	50.0	0.7	1.2	12.00	12.00	0.00	
10,275.0	6.16	86.11	10,274.7	50.2	2.8	3.2	12.00	12.00	0.00	
10,300.0	9.16	86.11	10,299.5	50.4	6.1	6.5	12.00	12.00	0.00	
10,325.0	12.16	86.11	10,324.0	50.7	10.7	11.1	12.00	12.00	0.00	
10,350.0	15.16	86.11	10,348.3	51.1	16.6	17.0	12.00	12.00	0.00	

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-2930	North Reference:	True
Well:	Wade Federal 5300 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (/100ft)	Build Rate (/100ft)	Turn Rate (/100ft)
10,375.0	18.16	86.11	10,372.3	51.6	23.7	24.2	12.00	12.00	0.00
10,400.0	21.16	86.11	10,395.8	52.2	32.1	32.6	12.00	12.00	0.00
10,425.0	24.16	86.11	10,418.9	52.8	41.7	42.2	12.00	12.00	0.00
10,450.0	27.16	86.11	10,441.4	53.6	52.5	53.0	12.00	12.00	0.00
10,475.0	30.16	86.11	10,463.3	54.4	64.5	65.0	12.00	12.00	0.00
10,500.0	33.16	86.11	10,484.6	55.3	77.6	78.1	12.00	12.00	0.00
10,525.0	36.16	86.11	10,505.2	56.2	91.8	92.3	12.00	12.00	0.00
10,550.0	39.16	86.11	10,525.0	57.3	107.0	107.5	12.00	12.00	0.00
10,575.0	42.16	86.11	10,543.9	58.4	123.3	123.8	12.00	12.00	0.00
10,600.0	45.16	86.11	10,562.0	59.5	140.5	141.0	12.00	12.00	0.00
10,625.0	48.16	86.11	10,579.2	60.8	158.6	159.2	12.00	12.00	0.00
10,650.0	51.16	86.11	10,595.3	62.1	177.6	178.2	12.00	12.00	0.00
10,675.0	54.16	86.11	10,610.5	63.4	197.5	198.0	12.00	12.00	0.00
10,700.0	57.16	86.11	10,624.6	64.8	218.1	218.6	12.00	12.00	0.00
10,725.0	60.16	86.11	10,637.6	66.3	239.4	239.9	12.00	12.00	0.00
10,750.0	63.16	86.11	10,649.5	67.8	261.3	261.9	12.00	12.00	0.00
10,765.0	64.96	86.11	10,656.0	68.7	274.8	275.4	12.00	12.00	0.00
False Bakken									
10,775.0	66.16	86.11	10,660.2	69.3	283.8	284.5	12.00	12.00	0.00
10,795.4	68.62	86.11	10,668.0	70.6	302.7	303.3	12.00	12.00	0.00
Upper Bakken Shale									
10,800.0	69.16	86.11	10,669.7	70.9	306.9	307.5	12.00	12.00	0.00
10,825.0	72.16	86.11	10,677.9	72.5	330.4	331.1	12.00	12.00	0.00
10,850.0	75.16	86.11	10,685.0	74.1	354.4	355.0	12.00	12.00	0.00
10,875.0	78.16	86.11	10,690.7	75.7	378.6	379.3	12.00	12.00	0.00
10,898.7	81.01	86.11	10,695.0	77.3	401.9	402.6	12.00	12.00	0.00
Middle Bakken (Top of Target)									
10,900.0	81.16	86.11	10,695.2	77.4	403.2	403.9	12.00	12.00	0.00
10,925.0	84.16	86.11	10,698.4	79.1	427.9	428.6	12.00	12.00	0.00
10,950.0	87.16	86.11	10,700.3	80.8	452.8	453.5	12.00	12.00	0.00
10,970.7	89.65	86.11	10,700.9	82.2	473.5	474.2	12.00	12.00	0.00
Start 19.6 hold at 10970.7 MD EOC									
10,990.3	89.65	86.11	10,701.0	83.5	493.0	493.7	0.00	0.00	0.00
Start DLS 2.00 TFO 90.00 Csg Pt - 7"									
11,000.0	89.65	86.31	10,701.1	84.1	502.7	503.4	2.00	0.00	2.00
11,100.0	89.65	88.31	10,701.7	88.8	602.5	603.3	2.00	0.00	2.00
11,184.7	89.65	90.00	10,702.2	90.1	687.2	688.0	2.00	0.00	2.00
Start 9341.0 hold at 11184.7 MD									
11,200.0	89.65	90.00	10,702.3	90.1	702.5	703.3	0.00	0.00	0.00
11,300.0	89.65	90.00	10,702.9	90.1	802.5	803.3	0.00	0.00	0.00
11,400.0	89.65	90.00	10,703.5	90.1	902.5	903.3	0.00	0.00	0.00
11,500.0	89.65	90.00	10,704.1	90.1	1,002.5	1,003.3	0.00	0.00	0.00
11,600.0	89.65	90.00	10,704.7	90.1	1,102.5	1,103.3	0.00	0.00	0.00
11,700.0	89.65	90.00	10,705.3	90.1	1,202.5	1,203.3	0.00	0.00	0.00
11,800.0	89.65	90.00	10,705.9	90.1	1,302.5	1,303.3	0.00	0.00	0.00
11,813.9	89.65	90.00	10,706.0	90.1	1,316.5	1,317.2	0.00	0.00	0.00
Middle Bakken (Base of target)									
11,900.0	89.65	90.00	10,706.5	90.1	1,402.5	1,403.3	0.00	0.00	0.00
12,000.0	89.65	90.00	10,707.2	90.1	1,502.5	1,503.3	0.00	0.00	0.00
12,100.0	89.65	90.00	10,707.8	90.1	1,602.5	1,603.3	0.00	0.00	0.00
12,200.0	89.65	90.00	10,708.4	90.1	1,702.5	1,703.3	0.00	0.00	0.00
12,300.0	89.65	90.00	10,709.0	90.1	1,802.5	1,803.2	0.00	0.00	0.00
12,400.0	89.65	90.00	10,709.6	90.1	1,902.5	1,903.2	0.00	0.00	0.00
12,500.0	89.65	90.00	10,710.2	90.1	2,002.5	2,003.2	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
12,600.0	89.65	90.00	10,710.8	90.1	2,102.5	2,103.2	0.00	0.00	0.00	
12,700.0	89.65	90.00	10,711.4	90.1	2,202.5	2,203.2	0.00	0.00	0.00	
12,800.0	89.65	90.00	10,712.0	90.1	2,302.5	2,303.2	0.00	0.00	0.00	
12,900.0	89.65	90.00	10,712.6	90.1	2,402.5	2,403.2	0.00	0.00	0.00	
13,000.0	89.65	90.00	10,713.2	90.1	2,502.5	2,503.2	0.00	0.00	0.00	
13,100.0	89.65	90.00	10,713.9	90.1	2,602.5	2,603.2	0.00	0.00	0.00	
13,200.0	89.65	90.00	10,714.5	90.1	2,702.5	2,703.2	0.00	0.00	0.00	
13,300.0	89.65	90.00	10,715.1	90.1	2,802.5	2,803.2	0.00	0.00	0.00	
13,400.0	89.65	90.00	10,715.7	90.1	2,902.5	2,903.2	0.00	0.00	0.00	
13,500.0	89.65	90.00	10,716.3	90.1	3,002.5	3,003.2	0.00	0.00	0.00	
13,600.0	89.65	90.00	10,716.9	90.1	3,102.5	3,103.2	0.00	0.00	0.00	
13,700.0	89.65	90.00	10,717.5	90.1	3,202.5	3,203.2	0.00	0.00	0.00	
13,800.0	89.65	90.00	10,718.1	90.1	3,302.5	3,303.2	0.00	0.00	0.00	
13,900.0	89.65	90.00	10,718.7	90.1	3,402.5	3,403.2	0.00	0.00	0.00	
14,000.0	89.65	90.00	10,719.3	90.1	3,502.5	3,503.1	0.00	0.00	0.00	
14,100.0	89.65	90.00	10,720.0	90.1	3,602.5	3,603.1	0.00	0.00	0.00	
14,200.0	89.65	90.00	10,720.6	90.1	3,702.5	3,703.1	0.00	0.00	0.00	
14,300.0	89.65	90.00	10,721.2	90.1	3,802.5	3,803.1	0.00	0.00	0.00	
14,400.0	89.65	90.00	10,721.8	90.1	3,902.5	3,903.1	0.00	0.00	0.00	
14,500.0	89.65	90.00	10,722.4	90.1	4,002.5	4,003.1	0.00	0.00	0.00	
14,600.0	89.65	90.00	10,723.0	90.1	4,102.5	4,103.1	0.00	0.00	0.00	
14,700.0	89.65	90.00	10,723.6	90.1	4,202.5	4,203.1	0.00	0.00	0.00	
14,800.0	89.65	90.00	10,724.2	90.1	4,302.5	4,303.1	0.00	0.00	0.00	
14,900.0	89.65	90.00	10,724.8	90.1	4,402.5	4,403.1	0.00	0.00	0.00	
15,000.0	89.65	90.00	10,725.4	90.1	4,502.5	4,503.1	0.00	0.00	0.00	
15,100.0	89.65	90.00	10,726.0	90.1	4,602.5	4,603.1	0.00	0.00	0.00	
15,200.0	89.65	90.00	10,726.7	90.1	4,702.5	4,703.1	0.00	0.00	0.00	
15,300.0	89.65	90.00	10,727.3	90.1	4,802.5	4,803.1	0.00	0.00	0.00	
15,400.0	89.65	90.00	10,727.9	90.1	4,902.5	4,903.1	0.00	0.00	0.00	
15,500.0	89.65	90.00	10,728.5	90.1	5,002.5	5,003.1	0.00	0.00	0.00	
15,600.0	89.65	90.00	10,729.1	90.1	5,102.5	5,103.1	0.00	0.00	0.00	
15,700.0	89.65	90.00	10,729.7	90.1	5,202.4	5,203.0	0.00	0.00	0.00	
15,800.0	89.65	90.00	10,730.3	90.1	5,302.4	5,303.0	0.00	0.00	0.00	
15,900.0	89.65	90.00	10,730.9	90.1	5,402.4	5,403.0	0.00	0.00	0.00	
16,000.0	89.65	90.00	10,731.5	90.1	5,502.4	5,503.0	0.00	0.00	0.00	
16,100.0	89.65	90.00	10,732.1	90.1	5,602.4	5,603.0	0.00	0.00	0.00	
16,200.0	89.65	90.00	10,732.8	90.1	5,702.4	5,703.0	0.00	0.00	0.00	
16,300.0	89.65	90.00	10,733.4	90.1	5,802.4	5,803.0	0.00	0.00	0.00	
16,400.0	89.65	90.00	10,734.0	90.1	5,902.4	5,903.0	0.00	0.00	0.00	
16,500.0	89.65	90.00	10,734.6	90.1	6,002.4	6,003.0	0.00	0.00	0.00	
16,600.0	89.65	90.00	10,735.2	90.1	6,102.4	6,103.0	0.00	0.00	0.00	
16,700.0	89.65	90.00	10,735.8	90.1	6,202.4	6,203.0	0.00	0.00	0.00	
16,800.0	89.65	90.00	10,736.4	90.1	6,302.4	6,303.0	0.00	0.00	0.00	
16,900.0	89.65	90.00	10,737.0	90.1	6,402.4	6,403.0	0.00	0.00	0.00	
17,000.0	89.65	90.00	10,737.6	90.1	6,502.4	6,503.0	0.00	0.00	0.00	
17,100.0	89.65	90.00	10,738.2	90.1	6,602.4	6,603.0	0.00	0.00	0.00	
17,200.0	89.65	90.00	10,738.8	90.1	6,702.4	6,703.0	0.00	0.00	0.00	
17,300.0	89.65	90.00	10,739.5	90.1	6,802.4	6,803.0	0.00	0.00	0.00	
17,400.0	89.65	90.00	10,740.1	90.1	6,902.4	6,902.9	0.00	0.00	0.00	
17,500.0	89.65	90.00	10,740.7	90.1	7,002.4	7,002.9	0.00	0.00	0.00	
17,600.0	89.65	90.00	10,741.3	90.1	7,102.4	7,102.9	0.00	0.00	0.00	
17,700.0	89.65	90.00	10,741.9	90.1	7,202.4	7,202.9	0.00	0.00	0.00	
17,800.0	89.65	90.00	10,742.5	90.1	7,302.4	7,302.9	0.00	0.00	0.00	
17,900.0	89.65	90.00	10,743.1	90.1	7,402.4	7,402.9	0.00	0.00	0.00	
18,000.0	89.65	90.00	10,743.7	90.1	7,502.4	7,502.9	0.00	0.00	0.00	

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
18,100.0	89.65	90.00	10,744.3	90.1	7,602.4	7,602.9	0.00	0.00	0.00	
18,200.0	89.65	90.00	10,744.9	90.1	7,702.4	7,702.9	0.00	0.00	0.00	
18,300.0	89.65	90.00	10,745.6	90.1	7,802.4	7,802.9	0.00	0.00	0.00	
18,400.0	89.65	90.00	10,746.2	90.1	7,902.4	7,902.9	0.00	0.00	0.00	
18,500.0	89.65	90.00	10,746.8	90.1	8,002.4	8,002.9	0.00	0.00	0.00	
18,600.0	89.65	90.00	10,747.4	90.1	8,102.4	8,102.9	0.00	0.00	0.00	
18,700.0	89.65	90.00	10,748.0	90.1	8,202.4	8,202.9	0.00	0.00	0.00	
18,800.0	89.65	90.00	10,748.6	90.1	8,302.4	8,302.9	0.00	0.00	0.00	
18,900.0	89.65	90.00	10,749.2	90.1	8,402.4	8,402.9	0.00	0.00	0.00	
19,000.0	89.65	90.00	10,749.8	90.1	8,502.4	8,502.9	0.00	0.00	0.00	
19,100.0	89.65	90.00	10,750.4	90.1	8,602.4	8,602.8	0.00	0.00	0.00	
19,200.0	89.65	90.00	10,751.0	90.1	8,702.4	8,702.8	0.00	0.00	0.00	
19,300.0	89.65	90.00	10,751.6	90.1	8,802.4	8,802.8	0.00	0.00	0.00	
19,400.0	89.65	90.00	10,752.3	90.1	8,902.4	8,902.8	0.00	0.00	0.00	
19,500.0	89.65	90.00	10,752.9	90.1	9,002.4	9,002.8	0.00	0.00	0.00	
19,600.0	89.65	90.00	10,753.5	90.1	9,102.4	9,102.8	0.00	0.00	0.00	
19,700.0	89.65	90.00	10,754.1	90.1	9,202.4	9,202.8	0.00	0.00	0.00	
19,800.0	89.65	90.00	10,754.7	90.1	9,302.4	9,302.8	0.00	0.00	0.00	
19,900.0	89.65	90.00	10,755.3	90.1	9,402.4	9,402.8	0.00	0.00	0.00	
20,000.0	89.65	90.00	10,755.9	90.1	9,502.4	9,502.8	0.00	0.00	0.00	
20,100.0	89.65	90.00	10,756.5	90.1	9,602.4	9,602.8	0.00	0.00	0.00	
20,200.0	89.65	90.00	10,757.1	90.1	9,702.4	9,702.8	0.00	0.00	0.00	
20,300.0	89.65	90.00	10,757.7	90.1	9,802.4	9,802.8	0.00	0.00	0.00	
20,400.0	89.65	90.00	10,758.3	90.1	9,902.4	9,902.8	0.00	0.00	0.00	
20,500.0	89.65	90.00	10,759.0	90.1	10,002.4	10,002.8	0.00	0.00	0.00	
20,525.6	89.65	90.00	10,759.1	90.1	10,028.0	10,028.4	0.00	0.00	0.00	

TD at 20525.6

Casing Points										
Measured Depth (ft)	Vertical Depth (ft)	Name			Casing Diameter (in)	Hole Diameter (in)				
2,050.0	2,050.0 13 3/8"				13.375	17.500				
10,990.3	10,701.0 7"				7.000	8.750				

Oasis Petroleum

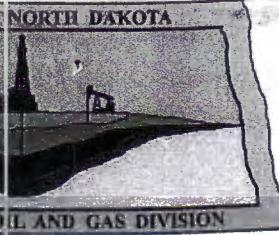
Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #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)			
11,813.9	10,706.0	Middle Bakken (Base of target)			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,020.0	2,020.0	0.0	0.0	Start Build 5.00	
2,030.0	2,030.0	0.0	0.0	Start 5719.7 hold at 2030.0 MD	
7,749.7	7,749.4	50.0	0.0	Start Drop -5.00	
7,759.7	7,759.4	50.0	0.0	Start 2240.6 hold at 7759.7 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	82.2	473.5	Start 19.6 hold at 10970.7 MD EOC	
10,990.3	10,701.0	83.5	493.0	Start DLS 2.00 TFO 90.00 Csg Pt	
11,184.7	10,702.2	90.1	687.2	Start 9341.0 hold at 11184.7 MD	
20,525.6	10,759.1	90.1	10,028.0	TD at 20525.6	

DRILLING PLAN							
OPERATOR	Oasis Petroleum			COUNTY/STATE	McKenzie Co., ND		
WELL NAME	Wade Federal 5300 41-30 BB			RIG	Nabors 149		
WELL TYPE	Horizontal Middle Bakken						
LOCATION	SW SW 30-153N-100W	Surface Location (survey plat)	910' FSL	280' FWL			
EST. T.D.	20,526'				GROUND ELEV:	2,045'	Sub Height: 25'
TOTAL LATERAL	9,536'				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		4,586	-2,496	CBL/GR:	Above top of cement/GR to base of casing		
Mowry		4,969	-2,896	MWD GR:	KOP to lateral TD		
Dakota		5,391	-3,321				
Rierdon		6,407	-4,337	DEVIATION:	Surf:	3 deg. max., 1 deg / 100'; svy every 500'	
Dunham Salt		6,896	-4,826	Prod:	5 deg. max., 1 deg / 100'; svy every 100'		
Dunham Salt Base		6,942	-4,872				
Pine Salt		7,205	-5,135				
Pine Salt Base		7,229	-5,159				
Opecche Salt		7,291	-5,221				
Opecche Salt Base		7,371	-5,301				
Amsden		7,615	-5,545				
Tyler		7,771	-5,701				
Otter/Base Minnelusa		7,994	-5,924				
Kibbey Lime		8,336	-6,266	DSTS:	None planned		
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		10,868	-8,598			30' samples in curve and lateral	
Middle Bakken (Top of Target)		10,895	-8,625				
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:	11.5%						
Max. Anticipated BHP:	4645						
Surface Formation:	Glacial till						
MUD:	Interval	Type	WT	Vis	WL	Remarks	
Surface:	0' -	2,050' FWGel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,050' -	10,990' Invert	9.5-10.4	40-50	30+HHp	Circ Mud Tanks	
Laterals:	10,990' -	20,526' 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"	2,050'	To Surface	12	100' into Pierre
Intermediate (Dakota):	9-5/8"	40#	12-1/4"	8,400'	To Surface	24	Set Casing across Dakota
Intermediate:	7"	32#	8-3/4"	10,990'	3891	24	1500' above Dakota
Production Liner:	4.5"	13.5#	6"	20,526'	TOL @ 10,174'		50' above KOP
PROBABLE PLUGS, IF REQ'D:							
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-P	AZI	
Surface:	2,050	2,050	910 FSL	280 FWL	30-T153-R100		Survey Company:
KOP:	10,224'	10,223'	860 FSL	280 FWL	30-T153-R100		Build Rate: 12 deg /100'
EOC:	10,971'	10,701'	828 FSL	754 FWL	30-T153-R100	86.1	
Casing Point:	10,990'	10,701'	827 FSL	773 FWL	30-T153-R100	86.1	
Middle Bakken Lateral TD:	20,526'	10,759'	1000 FSL	210 FEL	29-T153-R100	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 and 25 sleeves planned 3.6MM lbs 30% ceramic							
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: Fuel, diesel) 68476-34-6 (Primary Name: Fuel, diesel, No. 2) 68476-30-2 (Primary Name: Fuel oil, No. 2)							
68476-31-3 (Primary Name: Fuel oil, No. 4) 80008-20-6 (Primary Name: Kerosene)							
OASIS PETROLEUM							
Geology: N. Gabelman	1/20/2014	Engineering: mg 3.26					



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

28425

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

Date: 5/27/2014

RE: CORES AND SAMPLES

Well Name: **WADE FEDERAL 5300 41-30 6B** Well File No.: **28425**
Location: **LOT4 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:
 - 30' maximum intervals through all vertical and build sections.
 - 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



SUNDY NOTICES AND REPORTS ON WELLS - FORM 4

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

A circular stamp with a grid of numbers (1-20) around the perimeter. In the center, it says "FORM 4" with an upward arrow, "MAY 2014", "RECEIVED", "ND OIL & GAS", and "DIVISION".

Well File No.

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 1, 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	Waiver to rule Rule 43-02-03-31

Well Name and Number

Wade Federal 5300 41-30 6B

Footages		Qtr-Qtr	Section	Township	Range
910 F S L	280 F W L	SWSW	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

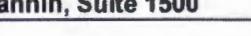
DETAILS OF WORK

Oasis Petroleum respectfully requests a waiver to Rule 43-02-03-31 in regards to running open hole logs for the above referenced well. Justification for this request is as follows:

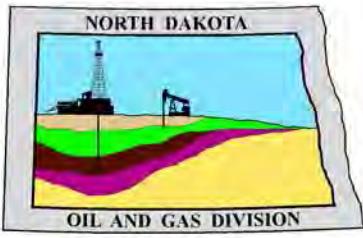
The Oasis Petroleum/ Wade Federal 5300 21-30H located within a mile of subject location

正20197

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
Signature 		Zip Code 77002
Printed Name Brandi Terry		
Title Regulatory Specialist	Date March 31, 2014	
Email Address bterry@oasispetroleum.com		

FOR STATE USE ONLY	
<input type="checkbox"/> Received	<input checked="" type="checkbox"/> Approved
Date	5-21-2014
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

May 21, 2014

Brandi Terry
Regulatory Specialist
OASIS PETROLEUM NORTH AMERICA LLC
1001 Fannin Suite 1500
Houston, TX 77002

**RE: HORIZONTAL WELL
WADE FEDERAL 5300 41-30 6B
LOT4 Section 30-153N-100W
McKenzie County
Well File # 28425**

Dear Brandi:

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 may set conductor on permitted wells only. 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: 10042'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 10 / 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 41-30 6B				
Surface Footages 910 F S L		Qtr-Qtr LOT4	Section 30	Township 153 N	Range 100 W	County McKenzie	
Longstring Casing Point Footages 994 F S L		Qtr-Qtr LOT4	Section 30	Township 153 N	Range 100 W	County McKenzie	
Longstring Casing Point Coordinates From Well Head 84 N From WH 493 E From WH		Azimuth 86.1 °	Longstring Total Depth 10990 Feet MD 10701 Feet TVD				
Bottom Hole Footages From Nearest Section Line 1000 F S L		Qtr-Qtr LOT6	Section 29	Township 153 N	Range 100 W	County Williams	
Bottom Hole Coordinates From Well Head 90 N From WH 10028 E From WH		KOP Lateral 1 10224 Feet MD	Azimuth Lateral 1 90.0 °	Estimated Total Depth Lateral 1 20526 Feet MD 10759 Feet TVD			
Latitude of Well Head 48 ° 02 ' 28.65 "	Longitude of Well Head -103 ° 36 ' 10.82 "	NAD Reference NAD83		Description of Spacing Unit: Sections 29 & 30 T153N R100W (Subject to NDIC Approval)			
Ground Elevation 2074 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 2050 Feet	Cement Volume 598 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 10990 Feet MD 10701 Feet TVD		Cement Volume 786 Sacks	Cement Top 3891 Feet	Top Dakota Sand 5391 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, Plats.
Cuttings will be hauled to an approved disposal facility.

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 / 31 / 2014

ePermit

Printed Name
Brandi Terry

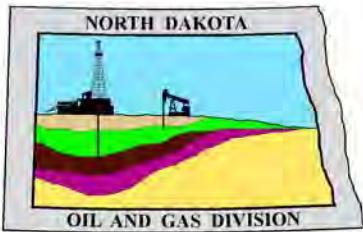
Title

Regulatory Specialist**FOR STATE USE ONLY**

Permit and File Number 28425	API Number 33 - 053 - 05954
Field BAKER	
Pool BAKKEN	Permit Type DEVELOPMENT

FOR STATE USE ONLY

Date Approved 5 / 21 / 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.

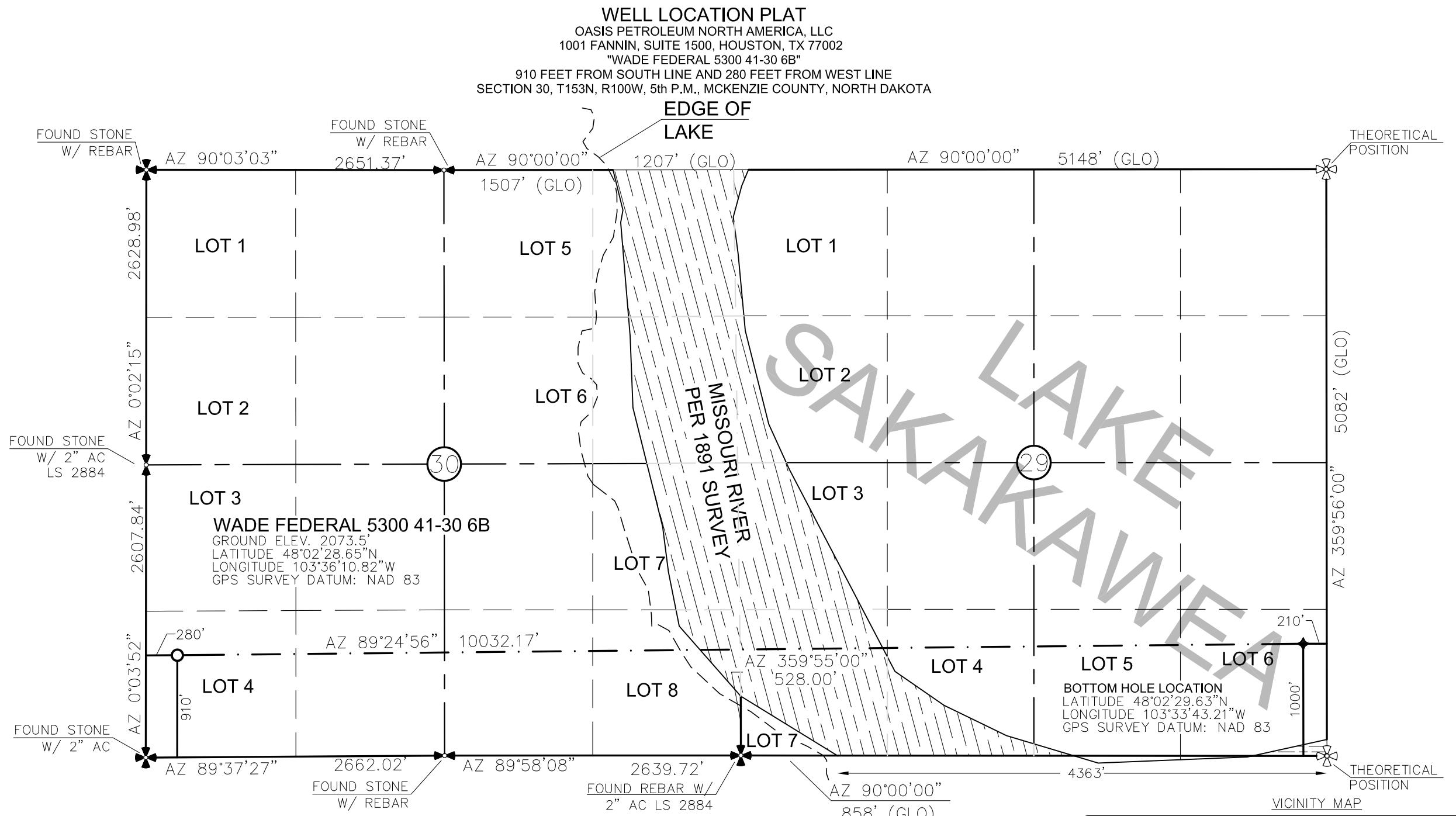
As previously stated in our March 13, 2014 letter, North Dakota Administrative Code Section 33-20-02.1-01 states in part that every person who transports solid waste (which includes oil and gas exploration and production wastes) is required to have a valid permit issued by the North Dakota Department 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.

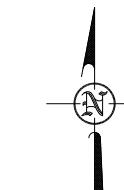
Sincerely,

Bruce E. Hicks

Assistant Director



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.



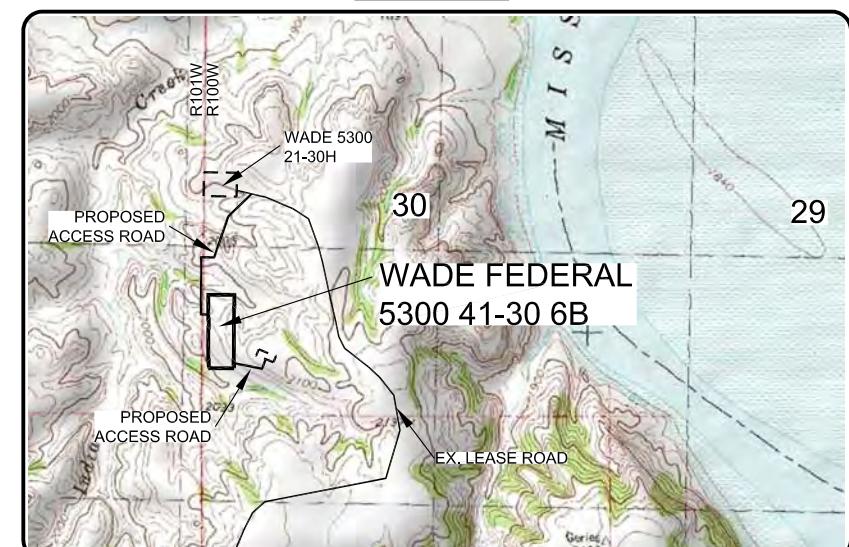
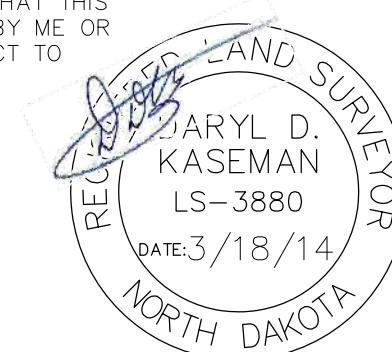
0
1" = 1000'

- MONUMENT - RECOVERED
- MONUMENT - NOT RECOVERED

DARYL D. KASEMAN LS-3880

STAKED ON 1/10/14
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.



© 2014, INTERSTATE ENGINEERING, INC.



1/8

	Revision No.	Date	By	Description
REV 1	3/17/14	JJS	Moved Wells On Pad & Access Road	

© 2013 SAK-30-38105 Oasis Petroleum - Wade 6B d/w - 3/19/2014
b. Well Pad CAD REVISED WADE 6B d/w - 3/19/2014 6:52 AM past schmierer

OASIS PETROLEUM NORTH AMERICA, LLC	WELL LOCATION PLAT
SECTION 30, T153N, R100W	
MCKENZIE COUNTY, NORTH DAKOTA	
Drawn By: BHH	Project No.: S13-09-38105
Checked By: DDK	Date: JAN 2014

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

Professionals you need, people you trust.

SHEET NO.

DRILLING PLAN							
OPERATOR	Oasis Petroleum			COUNTY/STATE	McKenzie Co., ND		
WELL NAME	Wade Federal 5300 41-30 6B			RIG	Nabors 149		
WELL TYPE	Horizontal Middle Bakken			LOCATION	SW SW 30-153N-100W Surface Location (survey plat): 910' FSL 280' FWL		
EST. T.D.	20,526'				GROUND ELEV:	2,045'	Sub Height: 25'
TOTAL LATERAL:	9,536'				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' Prod: 5 deg. max., 1 deg / 100'; svry every 100'		
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	MUDLOGGING:	Two-Man: Begin 200' above Kibbey 30' samples in curve and lateral		
Upper Bakken Shale		10,668	-8,598				
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	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' -	2,050' FW/Gel - Lime Sweeps	8.4-9.0	28-32	NC	Circ Mud Tanks	
Intermediate:	2,050' -	10,990' Invert	9.5-10.4	40-50	30+HtHp	Circ Mud Tanks	
Laterals:	10,990' -	20,526' Salt Water	9.8-10.2	28-32	NC	Circ Mud Tanks	
CASING:	Size	Wt ppf	Hole	Depth	Cement	WOC	Remarks
Surface:	9-5/8"	36#	13-1/2"	2,050'	To Surface	12	100' into Pierre
Intermediate:	7"	29/32#	8-3/4"	10,990'	3891	24	1500' above Dakota
Production Liner:	4.5"	11.6#	6"	20,526'	TOL @ 10,174'		50' above KOP
PROBABLE PLUGS, IF REQ'D:							
OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI	
Surface:	2,050	2,050	910 FSL	280 FWL	30-T153-R100		Survey Company:
KOP:	10,224'	10,223'	860 FSL	280 FWL	30-T153-R100		Build Rate: 12 deg /100'
EOC:	10,971'	10,701'	828 FSL	754 FWL	30-T153-R100	86.1	
Casing Point:	10,990'	10,701'	827 FSL	773 FWL	30-T153-R100	86.1	
Middle Bakken Lateral TD:	20,526'	10,759'	1000 FSL	210 FEL	29-T153-R100	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 and 25 sleeves planned 3.6MM lbs 30% ceramic							
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: smg3.26			

Oasis Petroleum
Well Summary
Wade Federal 5300 41-30 6B
Secion 30 T153N R100W
McKenzie Co, 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' - [2050]	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse	Burst	Tension
		(psi) / a	(psi) / b	(1000 lbs) / c
0' - [2050]	9-5/8", 36#, J-55, LTC, 8rd	2020 / 2.13	3520 / 3.72	453 / 2.78

API Rating & Safety Factor

- a) Based on full casing evacuation with 9 ppg fluid on backside **[2050]** setting depth).
- b) Burst pressure based on 9 ppg fluid with no fluid on backside **[2050]** setting depth).
- c) Based on string weight in 9 ppg fluid at **[2050]** VD plus 100k# overpull. (Buoyed weight equals 63k lbs.)

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

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

Lead Slurry: **425 sks** (225 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 41-30 6B
Secion 30 T153N R100W
McKenzie Co, 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' - 10990'	29	P-110	LTC	6.184"	6.059"	5980	7970	8770

**Special Drift 7" 32# to 6.0"

Interval	Length	Description	Collapse	Burst	Tension
			(psi) a	(psi) b	(1000 lbs) c
0' - 6696'	6696'	7", 29#, P-110, LTC, 8rd	8530 / 2.44*	11220 / 1.19	797 / 2.10
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 / 1.07**	12460 / 1.29	
10224' - 10990'	766'	7", 29#, P-110, LTC, 8rd	8530 / 1.53*	11220 / 1.16	

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 10702' TVD.
- c) Based on string weight in 10 ppg fluid, (279k 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

20bbls CW8

20bbls Fresh Water

Lead Slurry: **188 sks** (86 bbls), 11.8 ppg, 2.55 cu. ft./sk Econocem Cement with .3% Fe-2 and .25 lb/sk Lost Circulation Additive

Tail Slurry: **598 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 41-30 6B
Secion 30 T153N R100W
McKenzie Co, ND

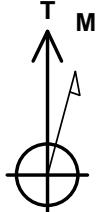
PRODUCTION LINER

Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Make-up Torque (ft-lbs)		
							Minimum	Optimum	Max
4-1/2"	10174' - 20568'	11.6	P-110	BTC	4.000"	3.875"	2270	3020	3780

Interval	Length	Desctiption	Collapse	Burst	Tension
			(psi) a	(psi) b	(1000 lbs) c
10174' - 20526'	10352	4-1/2", 11.6 lb, P-110, BTC	7560 / 1.42	10690 / 1.10	385 / 1.89

API Rating & Safety Factor

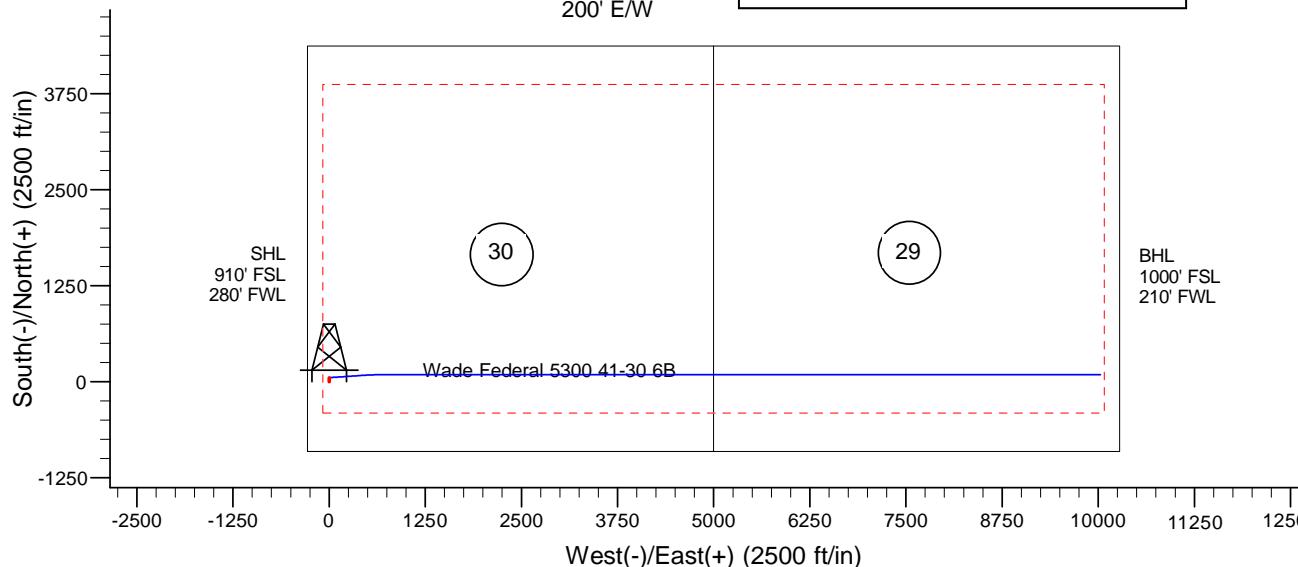
- a) Based on full casing evacuation with 9.5 ppg fluid on backside @ 10759' TVD.
- b) Burst pressure based on 9000 psi treating pressure with 10.2 ppg internal fluid gradient and 9 ppg external fluid gradient @ 10759' TVD.
- c) Based on string weight in 9.5 ppg fluid (Buoyed weight: 103k lbs.) plus 100k lbs overpull.


 Azimuths to True North
 Magnetic North: 8.18°
 Magnetic Field Strength: 56488.6snT
 Dip Angle: 72.95°
 Date: 1/28/2014
 Model: IGRF200510

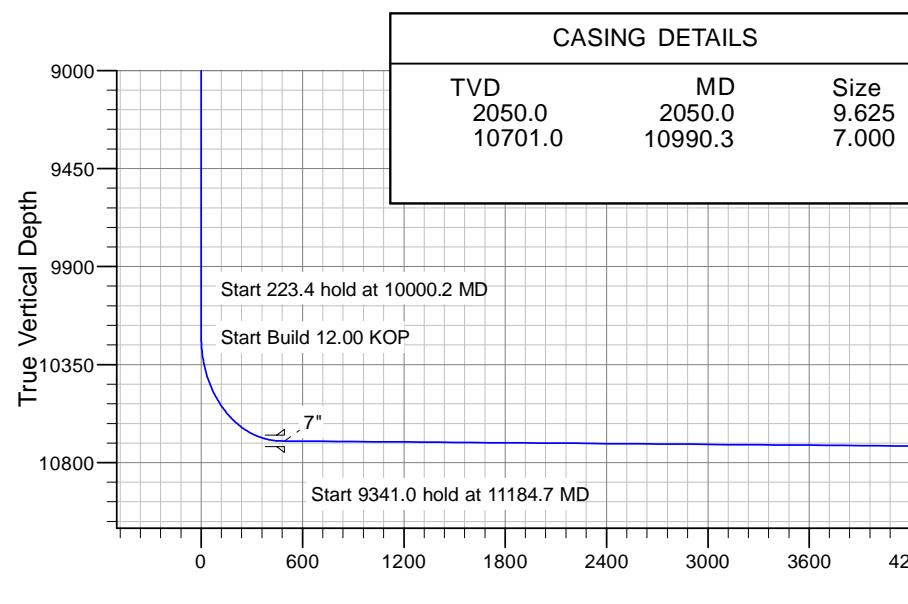
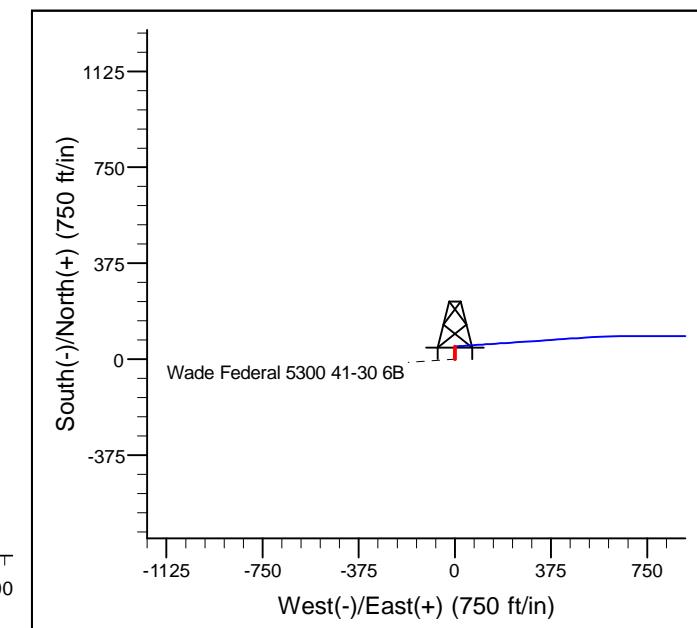


Project: Indian Hills
 Site: 153N-100W-29/30
 Well: Wade Federal 5300 41-30 6B
 Wellbore: Wade Federal 5300 41-30 6B
 Design: Design #1

Setbacks
 500' N/S
 200' E/W



SITE DETAILS: 153N-100W-29/30
 Site Centre Latitude: 48° 2' 28.650 N
 Longitude: 103° 36' 10.82 W
 Positional Uncertainty: 0.0
 Convergence: -2.31
 Local North: True



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
0.0	0.00	0.00	0.0	0.0	0.0	0.00
2050.0	0.00	0.00	2050.0	0.0	0.0	0.00
2060.0	0.50	0.00	2060.0	0.0	0.0	5.00
7779.7	0.50	0.00	7779.4	50.0	0.0	0.00
7789.7	0.00	0.00	7789.4	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	86.11	10700.9	82.2	473.5	12.00
10990.3	89.65	86.11	10701.0	83.5	493.0	0.00
11184.7	89.65	90.00	10702.2	90.1	687.2	2.00
20525.6	89.65	90.00	10759.1	90.1	10028.0	0.00

Oasis

**Indian Hills
153N-100W-29/30
Wade Federal 5300 41-30 6B**

Wade Federal 5300 41-30 6B

Plan: Design #1

Standard Planning Report

19 May, 2014

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #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	Latitude:	48° 2' 32.580 N
From:	Lat/Long	Easting:	1,209,621.64 ft	Longitude:	103° 36' 11.410 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-2.31 °

Well	Wade Federal 5300 41-30 6B				
Well Position	+N/-S +E/-W	-398.2 ft 40.1 ft	Northing: Easting:	395,121.92 ft 1,209,645.66 ft	Latitude: Longitude:
Position Uncertainty	0.0 ft		Wellhead Elevation:		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	Design #1			
Audit Notes:				
Version:				
Vertical Section:		Phase:	PROTOTYPE	Tie On Depth:
		Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)
		0.0	0.0	0.0
				89.49
Direction (°)				

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
2,050.0	0.00	0.00	2,050.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
2,060.0	0.50	0.00	2,060.0	0.0	0.0	5.00	5.00	0.00	0.00	0.00
7,779.7	0.50	0.00	7,779.4	50.0	0.0	0.00	0.00	0.00	0.00	0.00
7,789.7	0.00	0.00	7,789.4	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	86.11	10,700.9	82.2	473.5	12.00	12.00	0.00	86.11	
10,990.3	89.65	86.11	10,701.0	83.5	493.0	0.00	0.00	0.00	0.00	
11,184.7	89.65	90.00	10,702.2	90.1	687.2	2.00	0.00	2.00	90.00	
20,525.6	89.65	90.00	10,759.1	90.1	10,028.0	0.00	0.00	0.00	0.00	

Oasis Petroleum

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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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
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
2,020.0	0.00	0.00	2,020.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 5.00									
2,030.0	0.00	0.00	2,030.0	0.0	0.0	0.0	0.00	0.00	0.00
Start 5719.7 hold at 2030.0 MD									
2,050.0	0.00	0.00	2,050.0	0.0	0.0	0.0	0.00	0.00	0.00
9 5/8"									
2,060.0	0.50	0.00	2,060.0	0.0	0.0	0.0	5.00	5.00	0.00
2,100.0	0.50	0.00	2,100.0	0.4	0.0	0.0	0.00	0.00	0.00
2,200.0	0.50	0.00	2,200.0	1.3	0.0	0.0	0.00	0.00	0.00
2,300.0	0.50	0.00	2,300.0	2.1	0.0	0.0	0.00	0.00	0.00
2,400.0	0.50	0.00	2,400.0	3.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.50	0.00	2,500.0	3.9	0.0	0.0	0.00	0.00	0.00
2,600.0	0.50	0.00	2,600.0	4.8	0.0	0.0	0.00	0.00	0.00
2,700.0	0.50	0.00	2,700.0	5.6	0.0	0.1	0.00	0.00	0.00
2,800.0	0.50	0.00	2,800.0	6.5	0.0	0.1	0.00	0.00	0.00
2,900.0	0.50	0.00	2,900.0	7.4	0.0	0.1	0.00	0.00	0.00
3,000.0	0.50	0.00	3,000.0	8.2	0.0	0.1	0.00	0.00	0.00
3,100.0	0.50	0.00	3,100.0	9.1	0.0	0.1	0.00	0.00	0.00
3,200.0	0.50	0.00	3,200.0	10.0	0.0	0.1	0.00	0.00	0.00
3,300.0	0.50	0.00	3,300.0	10.9	0.0	0.1	0.00	0.00	0.00
3,400.0	0.50	0.00	3,399.9	11.7	0.0	0.1	0.00	0.00	0.00
3,500.0	0.50	0.00	3,499.9	12.6	0.0	0.1	0.00	0.00	0.00
3,600.0	0.50	0.00	3,599.9	13.5	0.0	0.1	0.00	0.00	0.00
3,700.0	0.50	0.00	3,699.9	14.4	0.0	0.1	0.00	0.00	0.00
3,800.0	0.50	0.00	3,799.9	15.2	0.0	0.1	0.00	0.00	0.00
3,900.0	0.50	0.00	3,899.9	16.1	0.0	0.1	0.00	0.00	0.00
4,000.0	0.50	0.00	3,999.9	17.0	0.0	0.2	0.00	0.00	0.00
4,100.0	0.50	0.00	4,099.9	17.8	0.0	0.2	0.00	0.00	0.00
4,200.0	0.50	0.00	4,199.9	18.7	0.0	0.2	0.00	0.00	0.00
4,300.0	0.50	0.00	4,299.9	19.6	0.0	0.2	0.00	0.00	0.00
4,400.0	0.50	0.00	4,399.9	20.5	0.0	0.2	0.00	0.00	0.00
4,500.0	0.50	0.00	4,499.9	21.3	0.0	0.2	0.00	0.00	0.00

Oasis Petroleum

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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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)	
4,566.1	0.50	0.00	4,566.0	21.9	0.0	0.2	0.00	0.00	0.00	
Greenhorn										
4,600.0	0.50	0.00	4,599.9	22.2	0.0	0.2	0.00	0.00	0.00	
4,700.0	0.50	0.00	4,699.9	23.1	0.0	0.2	0.00	0.00	0.00	
4,800.0	0.50	0.00	4,799.9	24.0	0.0	0.2	0.00	0.00	0.00	
4,900.0	0.50	0.00	4,899.9	24.8	0.0	0.2	0.00	0.00	0.00	
4,969.1	0.50	0.00	4,969.0	25.4	0.0	0.2	0.00	0.00	0.00	
Mowry										
5,000.0	0.50	0.00	4,999.9	25.7	0.0	0.2	0.00	0.00	0.00	
5,100.0	0.50	0.00	5,099.9	26.6	0.0	0.2	0.00	0.00	0.00	
5,200.0	0.50	0.00	5,199.9	27.4	0.0	0.2	0.00	0.00	0.00	
5,300.0	0.50	0.00	5,299.9	28.3	0.0	0.3	0.00	0.00	0.00	
5,391.1	0.50	0.00	5,391.0	29.1	0.0	0.3	0.00	0.00	0.00	
Dakota										
5,400.0	0.50	0.00	5,399.9	29.2	0.0	0.3	0.00	0.00	0.00	
5,500.0	0.50	0.00	5,499.9	30.1	0.0	0.3	0.00	0.00	0.00	
5,600.0	0.50	0.00	5,599.9	30.9	0.0	0.3	0.00	0.00	0.00	
5,700.0	0.50	0.00	5,699.9	31.8	0.0	0.3	0.00	0.00	0.00	
5,800.0	0.50	0.00	5,799.9	32.7	0.0	0.3	0.00	0.00	0.00	
5,900.0	0.50	0.00	5,899.9	33.6	0.0	0.3	0.00	0.00	0.00	
6,000.0	0.50	0.00	5,999.8	34.4	0.0	0.3	0.00	0.00	0.00	
6,100.0	0.50	0.00	6,099.8	35.3	0.0	0.3	0.00	0.00	0.00	
6,200.0	0.50	0.00	6,199.8	36.2	0.0	0.3	0.00	0.00	0.00	
6,300.0	0.50	0.00	6,299.8	37.0	0.0	0.3	0.00	0.00	0.00	
6,400.0	0.50	0.00	6,399.8	37.9	0.0	0.3	0.00	0.00	0.00	
6,407.2	0.50	0.00	6,407.0	38.0	0.0	0.3	0.00	0.00	0.00	
Rierdon										
6,500.0	0.50	0.00	6,499.8	38.8	0.0	0.3	0.00	0.00	0.00	
6,600.0	0.50	0.00	6,599.8	39.7	0.0	0.4	0.00	0.00	0.00	
6,700.0	0.50	0.00	6,699.8	40.5	0.0	0.4	0.00	0.00	0.00	
6,800.0	0.50	0.00	6,799.8	41.4	0.0	0.4	0.00	0.00	0.00	
6,896.2	0.50	0.00	6,896.0	42.2	0.0	0.4	0.00	0.00	0.00	
Dunham Salt										
6,900.0	0.50	0.00	6,899.8	42.3	0.0	0.4	0.00	0.00	0.00	
6,942.2	0.50	0.00	6,942.0	42.6	0.0	0.4	0.00	0.00	0.00	
Dunham Salt Base										
7,000.0	0.50	0.00	6,999.8	43.2	0.0	0.4	0.00	0.00	0.00	
7,100.0	0.50	0.00	7,099.8	44.0	0.0	0.4	0.00	0.00	0.00	
7,200.0	0.50	0.00	7,199.8	44.9	0.0	0.4	0.00	0.00	0.00	
7,205.2	0.50	0.00	7,205.0	44.9	0.0	0.4	0.00	0.00	0.00	
Pine Salt										
7,229.2	0.50	0.00	7,229.0	45.2	0.0	0.4	0.00	0.00	0.00	
Pine Salt Base										
7,291.2	0.50	0.00	7,291.0	45.7	0.0	0.4	0.00	0.00	0.00	
Opeche Salt										
7,300.0	0.50	0.00	7,299.8	45.8	0.0	0.4	0.00	0.00	0.00	
7,371.2	0.50	0.00	7,371.0	46.4	0.0	0.4	0.00	0.00	0.00	
Opeche Salt Base										
7,400.0	0.50	0.00	7,399.8	46.6	0.0	0.4	0.00	0.00	0.00	
7,500.0	0.50	0.00	7,499.8	47.5	0.0	0.4	0.00	0.00	0.00	
7,600.0	0.50	0.00	7,599.8	48.4	0.0	0.4	0.00	0.00	0.00	
7,615.2	0.50	0.00	7,615.0	48.5	0.0	0.4	0.00	0.00	0.00	
Amsden										
7,700.0	0.50	0.00	7,699.8	49.3	0.0	0.4	0.00	0.00	0.00	

Oasis Petroleum

Planning Report

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Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
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Well:	Wade Federal 5300 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)	
7,749.7	0.50	0.00	7,749.4	49.7	0.0	0.4	0.00	0.00	0.00	0.00
Start Drop -5.00										
7,759.7	0.50	0.00	7,759.4	49.8	0.0	0.4	0.00	0.00	0.00	0.00
Start 2240.6 hold at 7759.7 MD										
7,771.2	0.50	0.00	7,771.0	49.9	0.0	0.4	0.00	0.00	0.00	0.00
Tyler										
7,779.7	0.50	0.00	7,779.4	50.0	0.0	0.4	0.00	0.00	0.00	0.00
7,789.7	0.00	0.00	7,789.4	50.0	0.0	0.4	5.00	-5.00	0.00	0.00
7,800.0	0.00	0.00	7,799.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
7,900.0	0.00	0.00	7,899.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
7,994.2	0.00	0.00	7,994.0	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Otter/Base Minnelusa										
8,000.0	0.00	0.00	7,999.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,100.0	0.00	0.00	8,099.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,200.0	0.00	0.00	8,199.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,300.0	0.00	0.00	8,299.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,336.2	0.00	0.00	8,336.0	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Kibbey Lime										
8,400.0	0.00	0.00	8,399.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,484.2	0.00	0.00	8,484.0	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Charles Salt										
8,500.0	0.00	0.00	8,499.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,600.0	0.00	0.00	8,599.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,700.0	0.00	0.00	8,699.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,800.0	0.00	0.00	8,799.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
8,900.0	0.00	0.00	8,899.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,000.0	0.00	0.00	8,999.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,100.0	0.00	0.00	9,099.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,163.2	0.00	0.00	9,163.0	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Base Last Salt										
9,200.0	0.00	0.00	9,199.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,300.0	0.00	0.00	9,299.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,377.2	0.00	0.00	9,377.0	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Mission Canyon										
9,400.0	0.00	0.00	9,399.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,500.0	0.00	0.00	9,499.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,600.0	0.00	0.00	9,599.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,700.0	0.00	0.00	9,699.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,800.0	0.00	0.00	9,799.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,900.0	0.00	0.00	9,899.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
9,926.2	0.00	0.00	9,926.0	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Lodgepole										
10,000.2	0.00	0.00	10,000.0	50.0	0.0	0.4	0.00	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	0.4	0.00	0.00	0.00	0.00
10,200.0	0.00	0.00	10,199.8	50.0	0.0	0.4	0.00	0.00	0.00	0.00
10,223.6	0.00	0.00	10,223.4	50.0	0.0	0.4	0.00	0.00	0.00	0.00
Start Build 12.00 KOP										
10,225.0	0.16	86.11	10,224.8	50.0	0.0	0.5	12.00	12.00	0.00	
10,250.0	3.16	86.11	10,249.8	50.0	0.7	1.2	12.00	12.00	0.00	
10,275.0	6.16	86.11	10,274.7	50.2	2.8	3.2	12.00	12.00	0.00	
10,300.0	9.16	86.11	10,299.5	50.4	6.1	6.5	12.00	12.00	0.00	
10,325.0	12.16	86.11	10,324.0	50.7	10.7	11.1	12.00	12.00	0.00	
10,350.0	15.16	86.11	10,348.3	51.1	16.6	17.0	12.00	12.00	0.00	

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)
10,375.0	18.16	86.11	10,372.3	51.6	23.7	24.2	12.00	12.00	0.00
10,400.0	21.16	86.11	10,395.8	52.2	32.1	32.6	12.00	12.00	0.00
10,425.0	24.16	86.11	10,418.9	52.8	41.7	42.2	12.00	12.00	0.00
10,450.0	27.16	86.11	10,441.4	53.6	52.5	53.0	12.00	12.00	0.00
10,475.0	30.16	86.11	10,463.3	54.4	64.5	65.0	12.00	12.00	0.00
10,500.0	33.16	86.11	10,484.6	55.3	77.6	78.1	12.00	12.00	0.00
10,525.0	36.16	86.11	10,505.2	56.2	91.8	92.3	12.00	12.00	0.00
10,550.0	39.16	86.11	10,525.0	57.3	107.0	107.5	12.00	12.00	0.00
10,575.0	42.16	86.11	10,543.9	58.4	123.3	123.8	12.00	12.00	0.00
10,600.0	45.16	86.11	10,562.0	59.5	140.5	141.0	12.00	12.00	0.00
10,625.0	48.16	86.11	10,579.2	60.8	158.6	159.2	12.00	12.00	0.00
10,650.0	51.16	86.11	10,595.3	62.1	177.6	178.2	12.00	12.00	0.00
10,675.0	54.16	86.11	10,610.5	63.4	197.5	198.0	12.00	12.00	0.00
10,700.0	57.16	86.11	10,624.6	64.8	218.1	218.6	12.00	12.00	0.00
10,725.0	60.16	86.11	10,637.6	66.3	239.4	239.9	12.00	12.00	0.00
10,750.0	63.16	86.11	10,649.5	67.8	261.3	261.9	12.00	12.00	0.00
10,765.0	64.96	86.11	10,656.0	68.7	274.8	275.4	12.00	12.00	0.00
False Bakken									
10,775.0	66.16	86.11	10,660.2	69.3	283.8	284.5	12.00	12.00	0.00
10,795.4	68.62	86.11	10,668.0	70.6	302.7	303.3	12.00	12.00	0.00
Upper Bakken Shale									
10,800.0	69.16	86.11	10,669.7	70.9	306.9	307.5	12.00	12.00	0.00
10,825.0	72.16	86.11	10,677.9	72.5	330.4	331.1	12.00	12.00	0.00
10,850.0	75.16	86.11	10,685.0	74.1	354.4	355.0	12.00	12.00	0.00
10,875.0	78.16	86.11	10,690.7	75.7	378.6	379.3	12.00	12.00	0.00
10,898.7	81.01	86.11	10,695.0	77.3	401.9	402.6	12.00	12.00	0.00
Middle Bakken (Top of Target)									
10,900.0	81.16	86.11	10,695.2	77.4	403.2	403.9	12.00	12.00	0.00
10,925.0	84.16	86.11	10,698.4	79.1	427.9	428.6	12.00	12.00	0.00
10,950.0	87.16	86.11	10,700.3	80.8	452.8	453.5	12.00	12.00	0.00
10,970.7	89.65	86.11	10,700.9	82.2	473.5	474.2	12.00	12.00	0.00
Start 19.6 hold at 10970.7 MD EOC									
10,990.3	89.65	86.11	10,701.0	83.5	493.0	493.7	0.00	0.00	0.00
Start DLS 2.00 TFO 90.00 Csg Pt - 7"									
11,000.0	89.65	86.31	10,701.1	84.1	502.7	503.4	2.00	0.00	2.00
11,100.0	89.65	88.31	10,701.7	88.8	602.5	603.3	2.00	0.00	2.00
11,184.7	89.65	90.00	10,702.2	90.1	687.2	688.0	2.00	0.00	2.00
Start 9341.0 hold at 11184.7 MD									
11,200.0	89.65	90.00	10,702.3	90.1	702.5	703.3	0.00	0.00	0.00
11,300.0	89.65	90.00	10,702.9	90.1	802.5	803.3	0.00	0.00	0.00
11,400.0	89.65	90.00	10,703.5	90.1	902.5	903.3	0.00	0.00	0.00
11,500.0	89.65	90.00	10,704.1	90.1	1,002.5	1,003.3	0.00	0.00	0.00
11,600.0	89.65	90.00	10,704.7	90.1	1,102.5	1,103.3	0.00	0.00	0.00
11,700.0	89.65	90.00	10,705.3	90.1	1,202.5	1,203.3	0.00	0.00	0.00
11,800.0	89.65	90.00	10,705.9	90.1	1,302.5	1,303.3	0.00	0.00	0.00
11,813.9	89.65	90.00	10,706.0	90.1	1,316.5	1,317.2	0.00	0.00	0.00
Middle Bakken (Base of target)									
11,900.0	89.65	90.00	10,706.5	90.1	1,402.5	1,403.3	0.00	0.00	0.00
12,000.0	89.65	90.00	10,707.2	90.1	1,502.5	1,503.3	0.00	0.00	0.00
12,100.0	89.65	90.00	10,707.8	90.1	1,602.5	1,603.3	0.00	0.00	0.00
12,200.0	89.65	90.00	10,708.4	90.1	1,702.5	1,703.3	0.00	0.00	0.00
12,300.0	89.65	90.00	10,709.0	90.1	1,802.5	1,803.2	0.00	0.00	0.00
12,400.0	89.65	90.00	10,709.6	90.1	1,902.5	1,903.2	0.00	0.00	0.00
12,500.0	89.65	90.00	10,710.2	90.1	2,002.5	2,003.2	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)
12,600.0	89.65	90.00	10,710.8	90.1	2,102.5	2,103.2	0.00	0.00	0.00
12,700.0	89.65	90.00	10,711.4	90.1	2,202.5	2,203.2	0.00	0.00	0.00
12,800.0	89.65	90.00	10,712.0	90.1	2,302.5	2,303.2	0.00	0.00	0.00
12,900.0	89.65	90.00	10,712.6	90.1	2,402.5	2,403.2	0.00	0.00	0.00
13,000.0	89.65	90.00	10,713.2	90.1	2,502.5	2,503.2	0.00	0.00	0.00
13,100.0	89.65	90.00	10,713.9	90.1	2,602.5	2,603.2	0.00	0.00	0.00
13,200.0	89.65	90.00	10,714.5	90.1	2,702.5	2,703.2	0.00	0.00	0.00
13,300.0	89.65	90.00	10,715.1	90.1	2,802.5	2,803.2	0.00	0.00	0.00
13,400.0	89.65	90.00	10,715.7	90.1	2,902.5	2,903.2	0.00	0.00	0.00
13,500.0	89.65	90.00	10,716.3	90.1	3,002.5	3,003.2	0.00	0.00	0.00
13,600.0	89.65	90.00	10,716.9	90.1	3,102.5	3,103.2	0.00	0.00	0.00
13,700.0	89.65	90.00	10,717.5	90.1	3,202.5	3,203.2	0.00	0.00	0.00
13,800.0	89.65	90.00	10,718.1	90.1	3,302.5	3,303.2	0.00	0.00	0.00
13,900.0	89.65	90.00	10,718.7	90.1	3,402.5	3,403.2	0.00	0.00	0.00
14,000.0	89.65	90.00	10,719.3	90.1	3,502.5	3,503.1	0.00	0.00	0.00
14,100.0	89.65	90.00	10,720.0	90.1	3,602.5	3,603.1	0.00	0.00	0.00
14,200.0	89.65	90.00	10,720.6	90.1	3,702.5	3,703.1	0.00	0.00	0.00
14,300.0	89.65	90.00	10,721.2	90.1	3,802.5	3,803.1	0.00	0.00	0.00
14,400.0	89.65	90.00	10,721.8	90.1	3,902.5	3,903.1	0.00	0.00	0.00
14,500.0	89.65	90.00	10,722.4	90.1	4,002.5	4,003.1	0.00	0.00	0.00
14,600.0	89.65	90.00	10,723.0	90.1	4,102.5	4,103.1	0.00	0.00	0.00
14,700.0	89.65	90.00	10,723.6	90.1	4,202.5	4,203.1	0.00	0.00	0.00
14,800.0	89.65	90.00	10,724.2	90.1	4,302.5	4,303.1	0.00	0.00	0.00
14,900.0	89.65	90.00	10,724.8	90.1	4,402.5	4,403.1	0.00	0.00	0.00
15,000.0	89.65	90.00	10,725.4	90.1	4,502.5	4,503.1	0.00	0.00	0.00
15,100.0	89.65	90.00	10,726.0	90.1	4,602.5	4,603.1	0.00	0.00	0.00
15,200.0	89.65	90.00	10,726.7	90.1	4,702.5	4,703.1	0.00	0.00	0.00
15,300.0	89.65	90.00	10,727.3	90.1	4,802.5	4,803.1	0.00	0.00	0.00
15,400.0	89.65	90.00	10,727.9	90.1	4,902.5	4,903.1	0.00	0.00	0.00
15,500.0	89.65	90.00	10,728.5	90.1	5,002.5	5,003.1	0.00	0.00	0.00
15,600.0	89.65	90.00	10,729.1	90.1	5,102.5	5,103.1	0.00	0.00	0.00
15,700.0	89.65	90.00	10,729.7	90.1	5,202.4	5,203.0	0.00	0.00	0.00
15,800.0	89.65	90.00	10,730.3	90.1	5,302.4	5,303.0	0.00	0.00	0.00
15,900.0	89.65	90.00	10,730.9	90.1	5,402.4	5,403.0	0.00	0.00	0.00
16,000.0	89.65	90.00	10,731.5	90.1	5,502.4	5,503.0	0.00	0.00	0.00
16,100.0	89.65	90.00	10,732.1	90.1	5,602.4	5,603.0	0.00	0.00	0.00
16,200.0	89.65	90.00	10,732.8	90.1	5,702.4	5,703.0	0.00	0.00	0.00
16,300.0	89.65	90.00	10,733.4	90.1	5,802.4	5,803.0	0.00	0.00	0.00
16,400.0	89.65	90.00	10,734.0	90.1	5,902.4	5,903.0	0.00	0.00	0.00
16,500.0	89.65	90.00	10,734.6	90.1	6,002.4	6,003.0	0.00	0.00	0.00
16,600.0	89.65	90.00	10,735.2	90.1	6,102.4	6,103.0	0.00	0.00	0.00
16,700.0	89.65	90.00	10,735.8	90.1	6,202.4	6,203.0	0.00	0.00	0.00
16,800.0	89.65	90.00	10,736.4	90.1	6,302.4	6,303.0	0.00	0.00	0.00
16,900.0	89.65	90.00	10,737.0	90.1	6,402.4	6,403.0	0.00	0.00	0.00
17,000.0	89.65	90.00	10,737.6	90.1	6,502.4	6,503.0	0.00	0.00	0.00
17,100.0	89.65	90.00	10,738.2	90.1	6,602.4	6,603.0	0.00	0.00	0.00
17,200.0	89.65	90.00	10,738.8	90.1	6,702.4	6,703.0	0.00	0.00	0.00
17,300.0	89.65	90.00	10,739.5	90.1	6,802.4	6,803.0	0.00	0.00	0.00
17,400.0	89.65	90.00	10,740.1	90.1	6,902.4	6,902.9	0.00	0.00	0.00
17,500.0	89.65	90.00	10,740.7	90.1	7,002.4	7,002.9	0.00	0.00	0.00
17,600.0	89.65	90.00	10,741.3	90.1	7,102.4	7,102.9	0.00	0.00	0.00
17,700.0	89.65	90.00	10,741.9	90.1	7,202.4	7,202.9	0.00	0.00	0.00
17,800.0	89.65	90.00	10,742.5	90.1	7,302.4	7,302.9	0.00	0.00	0.00
17,900.0	89.65	90.00	10,743.1	90.1	7,402.4	7,402.9	0.00	0.00	0.00
18,000.0	89.65	90.00	10,743.7	90.1	7,502.4	7,502.9	0.00	0.00	0.00

Oasis Petroleum

Planning Report

Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
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 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate ('/100ft)	Build Rate ('/100ft)	Turn Rate ('/100ft)
18,100.0	89.65	90.00	10,744.3	90.1	7,602.4	7,602.9	0.00	0.00	0.00
18,200.0	89.65	90.00	10,744.9	90.1	7,702.4	7,702.9	0.00	0.00	0.00
18,300.0	89.65	90.00	10,745.6	90.1	7,802.4	7,802.9	0.00	0.00	0.00
18,400.0	89.65	90.00	10,746.2	90.1	7,902.4	7,902.9	0.00	0.00	0.00
18,500.0	89.65	90.00	10,746.8	90.1	8,002.4	8,002.9	0.00	0.00	0.00
18,600.0	89.65	90.00	10,747.4	90.1	8,102.4	8,102.9	0.00	0.00	0.00
18,700.0	89.65	90.00	10,748.0	90.1	8,202.4	8,202.9	0.00	0.00	0.00
18,800.0	89.65	90.00	10,748.6	90.1	8,302.4	8,302.9	0.00	0.00	0.00
18,900.0	89.65	90.00	10,749.2	90.1	8,402.4	8,402.9	0.00	0.00	0.00
19,000.0	89.65	90.00	10,749.8	90.1	8,502.4	8,502.9	0.00	0.00	0.00
19,100.0	89.65	90.00	10,750.4	90.1	8,602.4	8,602.8	0.00	0.00	0.00
19,200.0	89.65	90.00	10,751.0	90.1	8,702.4	8,702.8	0.00	0.00	0.00
19,300.0	89.65	90.00	10,751.6	90.1	8,802.4	8,802.8	0.00	0.00	0.00
19,400.0	89.65	90.00	10,752.3	90.1	8,902.4	8,902.8	0.00	0.00	0.00
19,500.0	89.65	90.00	10,752.9	90.1	9,002.4	9,002.8	0.00	0.00	0.00
19,600.0	89.65	90.00	10,753.5	90.1	9,102.4	9,102.8	0.00	0.00	0.00
19,700.0	89.65	90.00	10,754.1	90.1	9,202.4	9,202.8	0.00	0.00	0.00
19,800.0	89.65	90.00	10,754.7	90.1	9,302.4	9,302.8	0.00	0.00	0.00
19,900.0	89.65	90.00	10,755.3	90.1	9,402.4	9,402.8	0.00	0.00	0.00
20,000.0	89.65	90.00	10,755.9	90.1	9,502.4	9,502.8	0.00	0.00	0.00
20,100.0	89.65	90.00	10,756.5	90.1	9,602.4	9,602.8	0.00	0.00	0.00
20,200.0	89.65	90.00	10,757.1	90.1	9,702.4	9,702.8	0.00	0.00	0.00
20,300.0	89.65	90.00	10,757.7	90.1	9,802.4	9,802.8	0.00	0.00	0.00
20,400.0	89.65	90.00	10,758.3	90.1	9,902.4	9,902.8	0.00	0.00	0.00
20,500.0	89.65	90.00	10,759.0	90.1	10,002.4	10,002.8	0.00	0.00	0.00
20,525.6	89.65	90.00	10,759.1	90.1	10,028.0	10,028.4	0.00	0.00	0.00

TD at 20525.6

Casing Points			
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)
2,050.0	2,050.0 9 5/8"		9.625
10,990.3	10,701.0 7"		7.000

Oasis Petroleum

Planning Report

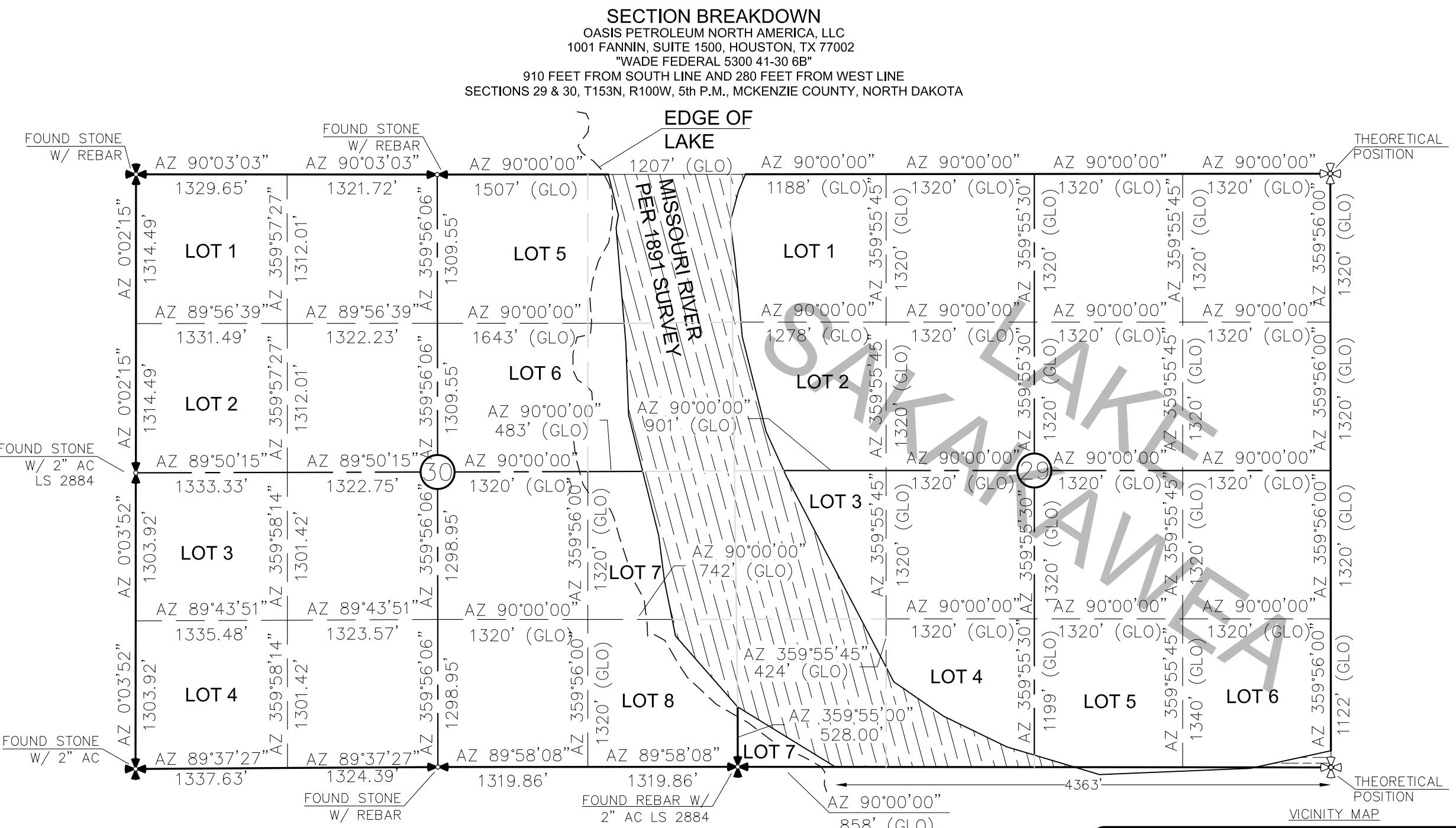
Database:	OpenWellsCompass - EDM Prod	Local Co-ordinate Reference:	Well Wade Federal 5300 41-30 6B
Company:	Oasis	TVD Reference:	WELL @ 2070.0ft (Original Well Elev)
Project:	Indian Hills	MD Reference:	WELL @ 2070.0ft (Original Well Elev)
Site:	153N-100W-29/30	North Reference:	True
Well:	Wade Federal 5300 41-30 6B	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wade Federal 5300 41-30 6B		
Design:	Design #1		

Formations

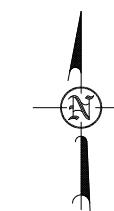
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,920.0	1,920.0	Pierre			
4,566.1	4,566.0	Greenhorn			
4,969.1	4,969.0	Mowry			
5,391.1	5,391.0	Dakota			
6,407.2	6,407.0	Rierdon			
6,896.2	6,896.0	Dunham Salt			
6,942.2	6,942.0	Dunham Salt Base			
7,205.2	7,205.0	Pine 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)			
11,813.9	10,706.0	Middle Bakken (Base of target)			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			Comment
		+N/-S (ft)	+E/-W (ft)		
2,020.0	2,020.0	0.0	0.0	Start Build 5.00	
2,030.0	2,030.0	0.0	0.0	Start 5719.7 hold at 2030.0 MD	
7,749.7	7,749.4	50.0	0.0	Start Drop -5.00	
7,759.7	7,759.4	50.0	0.0	Start 2240.6 hold at 7759.7 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	82.2	473.5	Start 19.6 hold at 10970.7 MD EOC	
10,990.3	10,701.0	83.5	493.0	Start DLS 2.00 TFO 90.00 Csg Pt	
11,184.7	10,702.2	90.1	687.2	Start 9341.0 hold at 11184.7 MD	
20,525.6	10,759.1	90.1	10,028.0	TD at 20525.6	



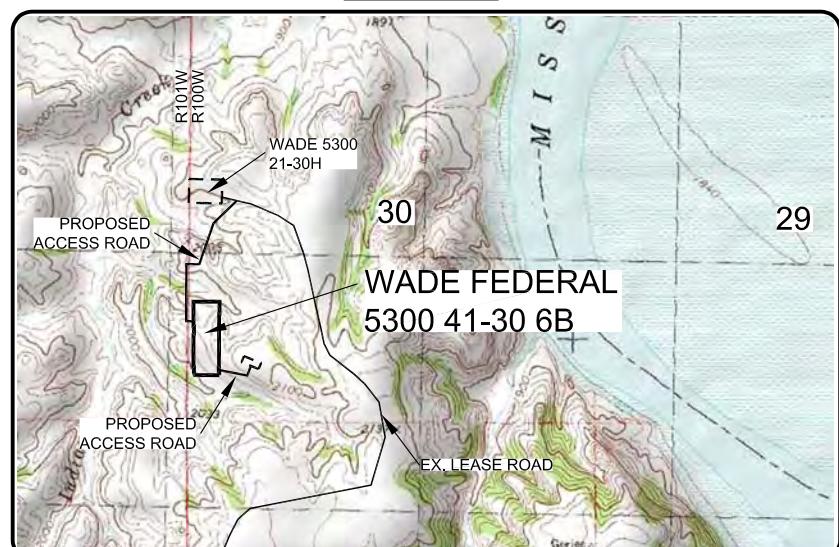
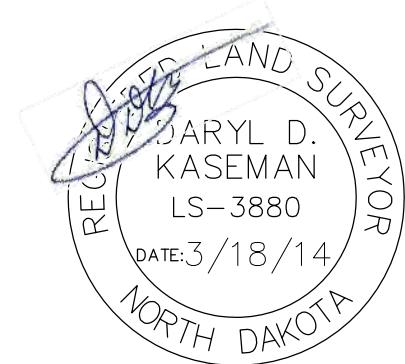
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- MONUMENT - RECOVERED
- MONUMENT - NOT RECOVERED

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'.



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

Drawn By: B.H.H.	Checked By: D.D.K.
Project No.: SI13-09-381.05	Date: JAN 2014

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

c: Well Pad CAD (REVIEWED WADE 6B dng - 3/19/2014
o: Wall location

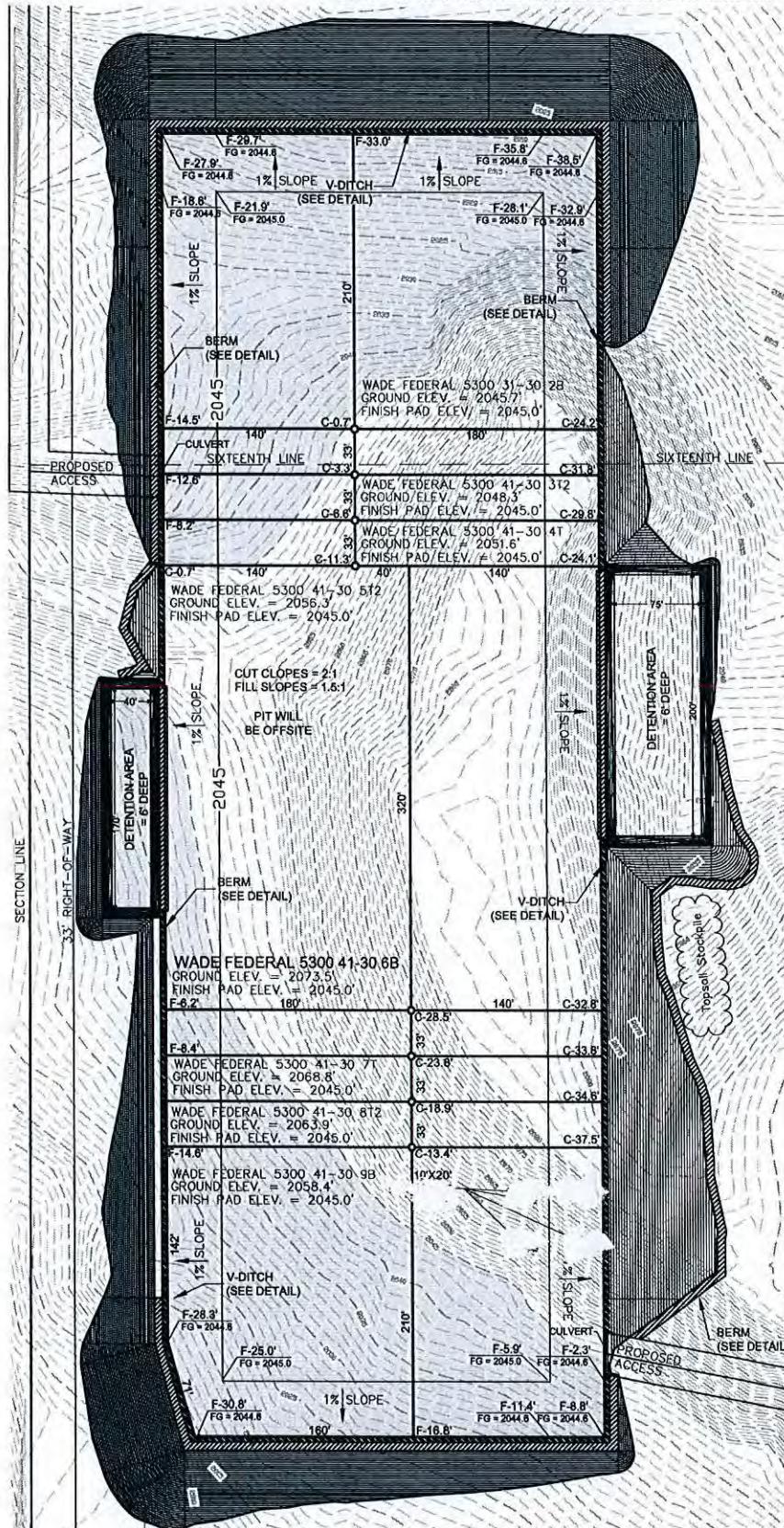
PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC

TANNIN, SUITE 1500, HOUSTON, TX
77002-3500

"WADE FEDERAL 5300 41-30 6B"

910 FEET FROM SOUTH LINE AND 280 FEET FROM WEST LINE
SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA



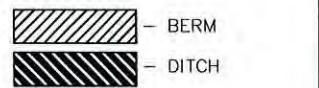
NOTE: All utilities shown are preliminary only, a complete utilities location is recommended before construction.

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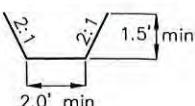
NOTE: Pad dimensions shown are to usable area, the v-ditch and berm areas shall be built to the outside of the pad dimensions.



- Proposed Contours



V-DITCH DETAIL



WELL LOCATION SITE QUANTITIES
 OASIS PETROLEUM NORTH AMERICA, LLC
 1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
 "WADE FEDERAL 5300 41-30 6B"
 910 FEET FROM SOUTH LINE AND 280 FEET FROM WEST LINE
 SECTION 30, T153N, R100W, 5th P.M., MCKENZIE COUNTY, NORTH DAKOTA

WELL SITE ELEVATION	2073.5
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

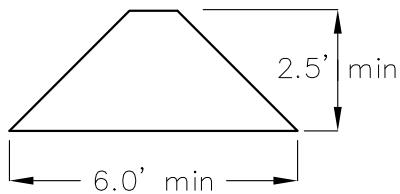
FILL END SLOPES AT 1.5:1

WELL SITE LOCATION

910' FSL

280' FWL

BERM DETAIL



DITCH DETAIL



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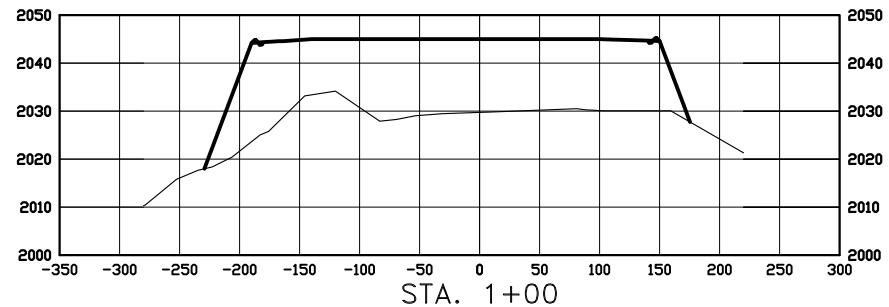
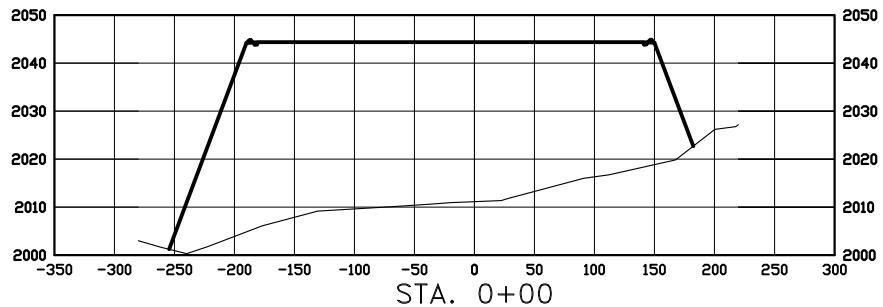
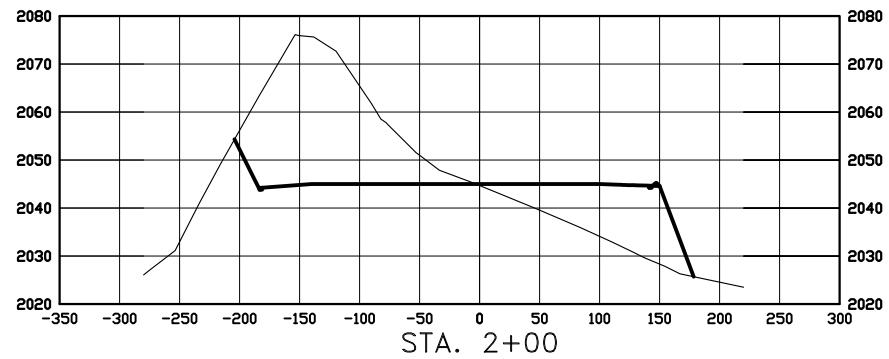
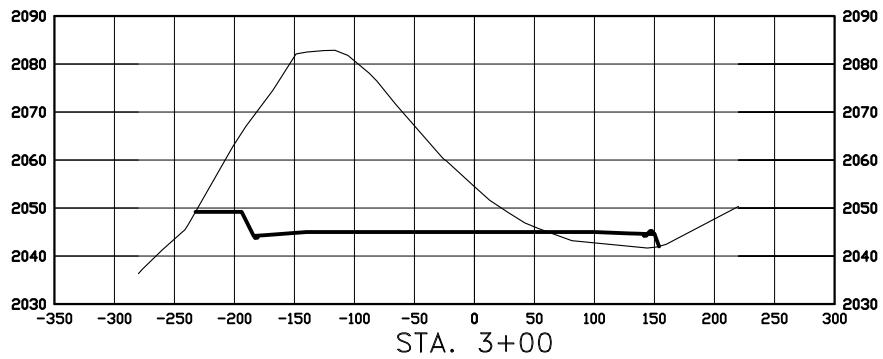
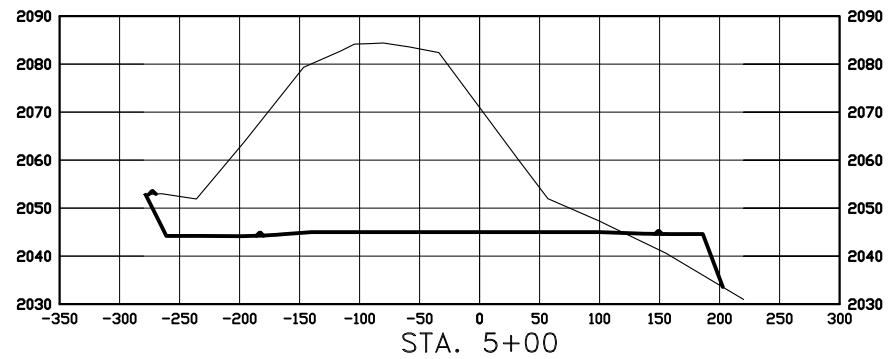
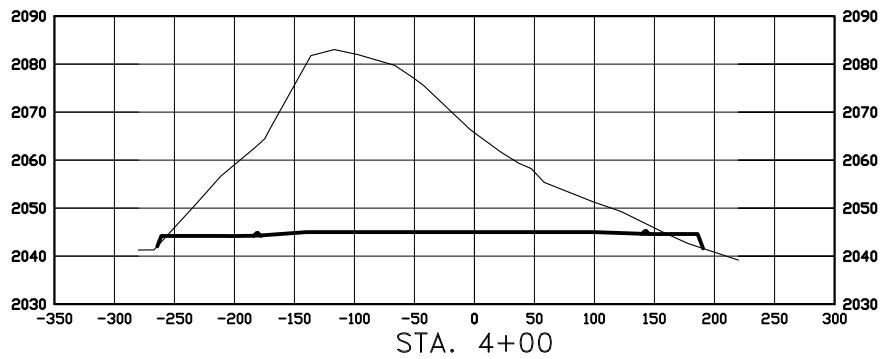
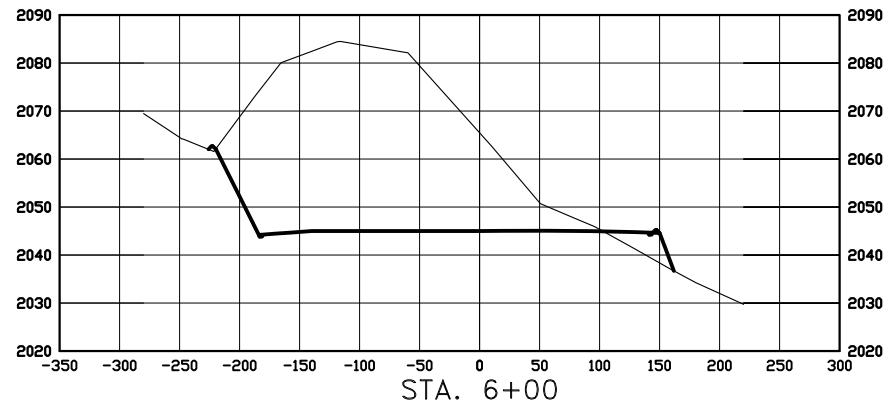
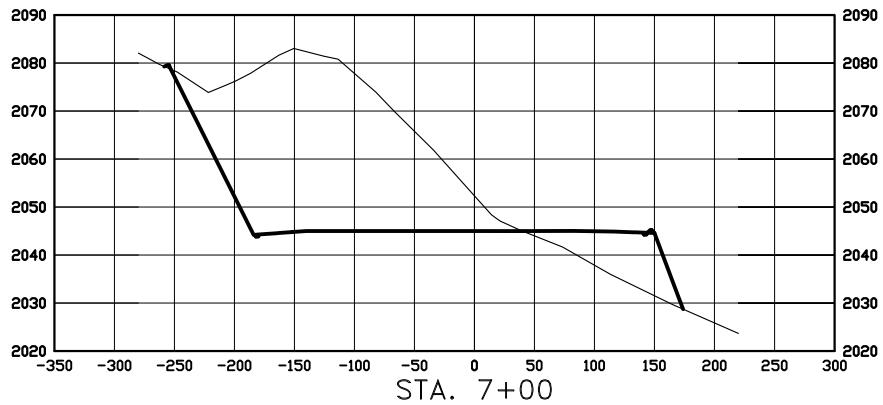
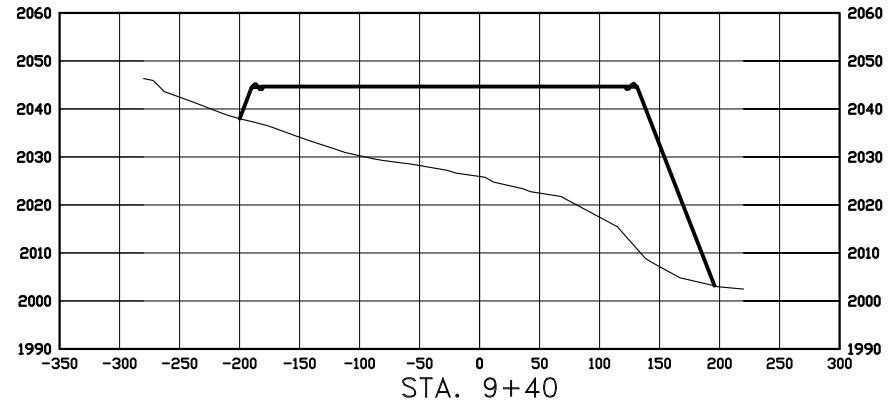
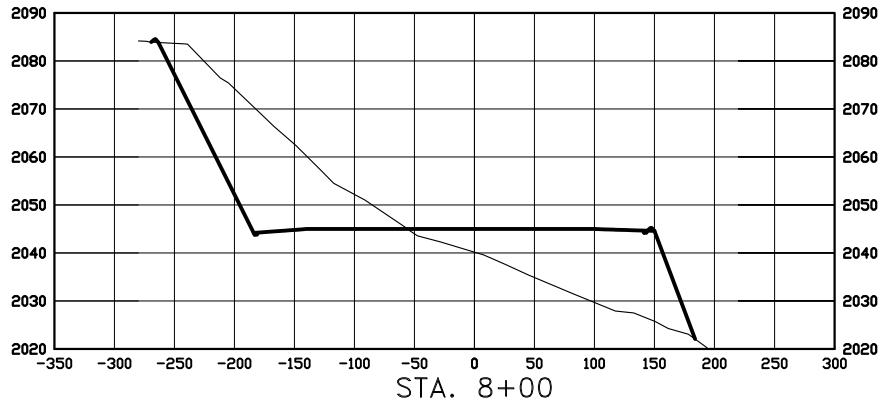
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 Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC
 QUANTITIES
 SECTION 30, T153N, R100W
 MCKENZIE COUNTY, NORTH DAKOTA
 Drawn By: B.H.H. Project No.: S13-09-381.05
 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

CROSS SECTIONS
 OASIS PETROLEUM NORTH AMERICA, LLC
 1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
 "WADE FEDERAL 5300 41-30 6B"
 910 FEET FROM SOUTH LINE AND 280 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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 CROSS SECTIONS
 SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

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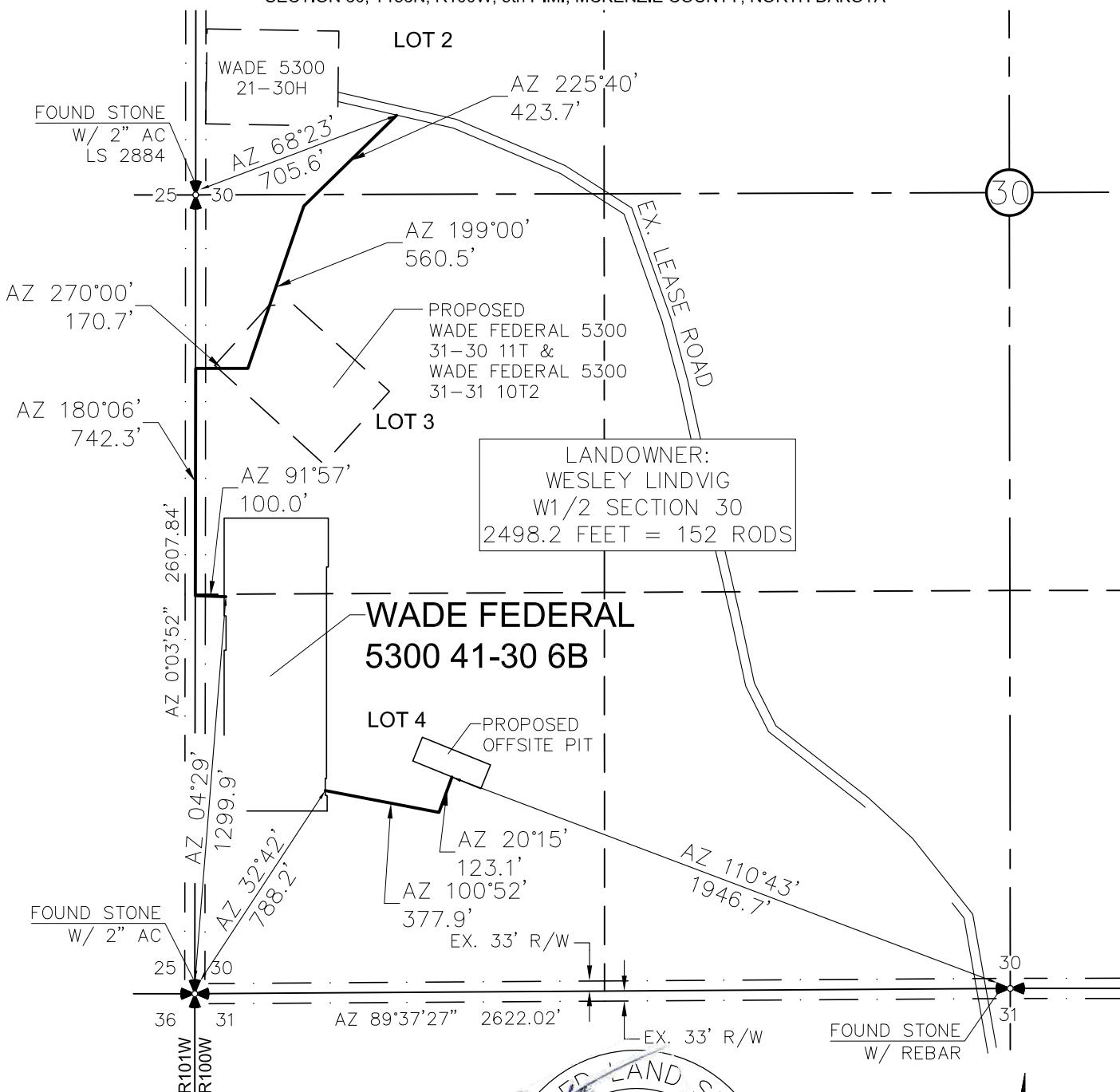
O:\2013\ST13-09\381.05\Oasis Petroleum - Wade 5300 41-30 6B Well Location
 E-Well Pad\CAD\REVISED WADE 6B.dwg - 3/19/2014 6:54 AM josh schmierer

ACCESS APPROACH

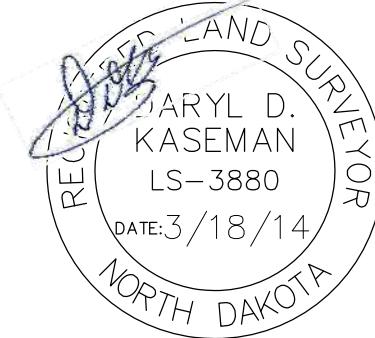
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002

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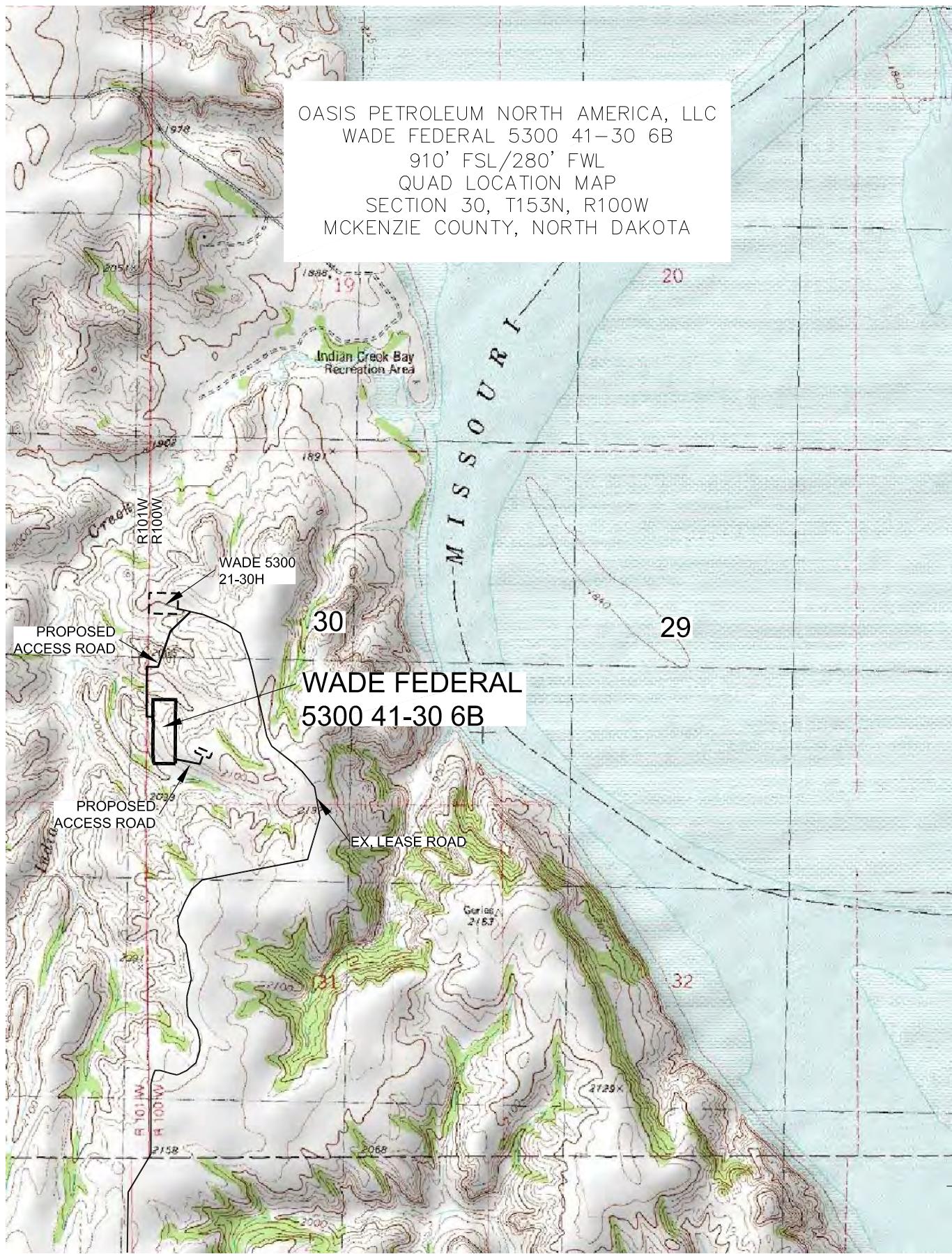
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OASIS PETROLEUM NORTH AMERICA, LLC
ACCESS APPROACH
SECTION 30, T153N, R100W
MCKENZIE COUNTY, NORTH DAKOTA
Drawn By: B.H.H. Project No.: S13-09-381.05
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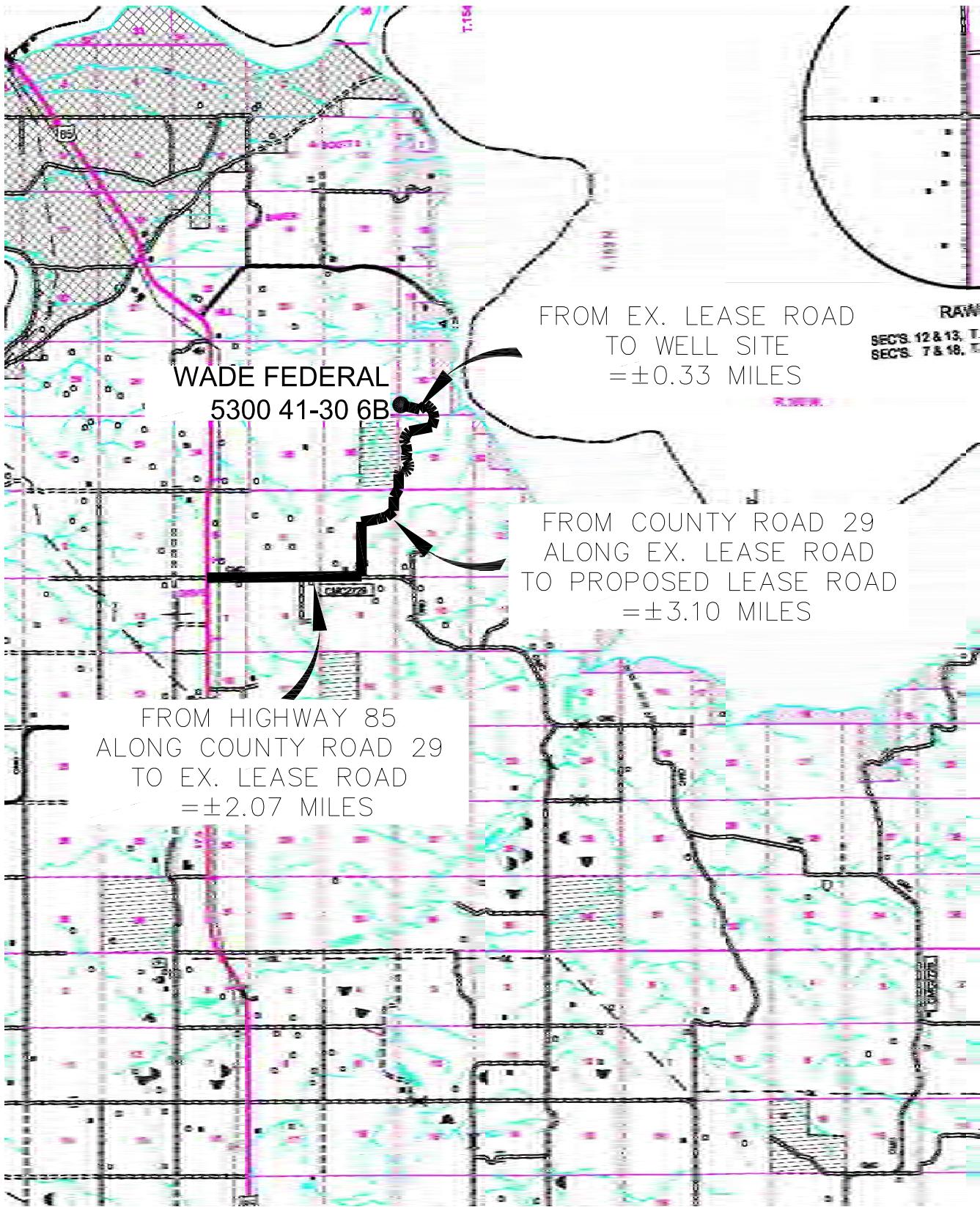
OASIS PETROLEUM NORTH AMERICA, LLC
 QUAD LOCATION MAP
 SECTION 30, T153N, R100W

MCKENZIE COUNTY, NORTH DAKOTA

Drawn By:	B.H.H.	Project No.:	S13-09-381.05
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

COUNTY ROAD MAP
 OASIS PETROLEUM NORTH AMERICA, LLC
 1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
 "WADE FEDERAL 5300 41-30 6B"
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OASIS PETROLEUM NORTH AMERICA, LLC
 COUNTY ROAD MAP
 SECTION 30, T153N, R100W
 MCKENZIE COUNTY, NORTH DAKOTA

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REV 1	3/17/14	JJS	MOVED WELLS ON PAD & ACCESS ROAD



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

Brandi Terry

Brandi Terry
Regulatory Specialist
Oasis Petroleum North America, LLC