Well Integrity Report - Form 19 Summary

INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
600 EAST BOULEVARD DEPT 405
BISMARCK, ND 58505-0840

Well File No. 90329
UIC No. W0437S0919D

Test Date:	3/31/2020 10:58:29 AM	**Contractor Performing Pressure Test:**	Castle				
Operator:	OASIS PETROLEUM NORTH AMERICA LLC			**Telephone :**	2814049500		
Address:	1001 FANNIN STE 1500	**City:**	HOUSTON	**State:**	TX	**Zip Code:**	77002
Well Name:	CARSON SWD 5301 12-24			**Field:**	BAKER		
Location:	**Qtr-Qtr:** NENW	**Section:** 24	**Township:** 153	**Range:** 101	**Cnty:** MCKENZIE		

WELL TEST DATA

Formation:	DAKOTA	**Perforations:**	5950-7080 *Feet*
Tool Type:	PKR **Depth:** 5821 *Feet*	**Packer Model:**	Nickle plated Arrowset
Tubing Size:	4.5 *Inches*	**Tubing Type:**	11.6 # J-55 Polycore
Well Type:	Disposal Well **Reason for Test:**	UIC MIT	**Test Type :** 5 Year MIT

	BEFORE TEST	**START of TEST**	**END of TEST**
Tubing Pressure:	1400 *PSIG* Flowing	1400 *PSIG* Flowing	1400 *PSIG* Flowing
Annulus or Casing Pressure:	0 *PSIG*	1000 *PSIG*	1000 *PSIG*

Annulus or Casing Fluid : Treated Salt Water **Test Fluid:** Salt Water
Amount of Fluid Needed to Fill Annulus or Casing: 0.25 *Bbls*
Test Length: 15 *Minutes* **Was Annulus or Casing Bled to Zero After Test?:** Yes **If No - Pressure Left:**

INSPECTION COMMENTS

Test Result: Acceptable **Report of Work Done Required:** No

MIT passed with no pressure loss over 15 min, MIT due for 5 year test.

This Report is true and complete to the best of my knowledge.

Company Representative Witnessing Test: Joe Brock **Title:** SWD Field Foreman
Commission Field Inspector Witnessing Test: William Ryan

NDIC Initials JT

RECEIVED
APR - 8 2019
ND OIL & GAS DIVISION

AUTHORIZATION TO PURCHASE AND TRANSPORT OIL FROM LEASE – Form 8 50209

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.
90329
NDIC CTB No.
6502C9

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.
PLEASE SUBMIT THE ORIGINAL AND FOUR COPIES.

Well Name and Number	Qtr-Qtr	Section	Township	Range	County
CARSON SWD 5301 12-24	NENW	24	153	101	Mckenzie

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

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

Name of First Purchaser	Telephone Number	% Purchased	Date Effective
Oasis Petroleum Marketing LLC	(281) 404-9627	100%	January 1, 2019

Principal Place of Business	City	State	Zip Code
1001 Fannin, Suite 1500	Houston	TX	77002

Field Address	City	State	Zip Code

Transporter	Telephone Number	% Transported	Date Effective
Power Energy Logistics, LLC	(512) 363-5296	100%	January 1, 2019

Address	City	State	Zip Code
1927 Lohmans Crossing Suite 103	Lakeway	TX	78734

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 Transporters Transporting From This Lease	% Transported	Date Effective
		January 1, 2019
Other Transporters Transporting From This Lease	% Transported	Date Effective
		January 1, 2019
Other Transporters Transporting From This Lease	% Transported	Date Effective
		January 1, 2019
Other Transporters Transporting From This Lease	% Transported	Date Effective
		January 1, 2019

Comments

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records.		Date
		April 3, 2019
Signature	Printed Name	Title
	Claudia Arguelles	Contracts Administrator

Above Signature Witnessed By:

Signature	Printed Name	Title
	Kenzie Buchanan	Scheduler

FOR STATE USE ONLY

Date Approved	APR 11 2019
By	Melissa Heinz
Title	Oil & Gas Production Analyst

NORTH DAKOTA
OIL AND GAS DIVISION

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/

90329

May 11, 2016

RE: **Saltwater Disposal Well Reporting and Monitoring Requirements**

Dear Saltwater Disposal Operator:

This letter is to outline and clarify the Commission's requirements for monthly reporting and monitoring of saltwater disposal wells which are outlined under North Dakota Administrative Code (NDAC) Section 43-02-05-12, and the type of wastes that can be injected pursuant to the EPA guidelines for Exempt and Non-Exempt Oil and Gas Exploration and Production Wastes.

All injection into a saltwater disposal well must be measured, either through a meter or by an approved method. Accurate gauges must be placed on the tubing and tubing-casing annulus of the well for pressure monitoring. Any noncompliance with regulations or permit conditions must be reported to the Commission orally within 24 hours followed by a written explanation within 5 days.

Monthly reporting of the following information is required to be submitted for a saltwater disposal well on a Saltwater Disposal Report (Form 16):

1. Beginning and end of month meter readings.
2. Total barrels injected for the month.
3. Average daily operating injection pressure (this means a typical pressure observed while the well is injecting, not a mathematical average).
4. Sources of received fluid (these sources need to be listed by well or facility name and number, NDIC well or facility file number, and the location of each source by quarter-quarter, section, township, and range).
5. Amount of fluid received from each source.
6. Nature of the received fluid (i.e. produced water, pit water, etc.).
7. Transportation method used to transport the injection fluid to the disposal well site (i.e. pipeline or truck).

Saltwater Disposal Reports (Form 16) are due on or before the fifth day of the second month succeeding the month in which the well is capable of disposal (i.e. January report due March 5th).

Pursuant to NDAC Section 43-02-05-13.1, all records from which to make and substantiate required reports shall be kept for a period of not less than six years.

The NDIC abides by the Environmental Protection Agency guidelines for Exempt and Non-Exempt Oil and Gas Exploration and Production Wastes to determine what wastes can be accepted for disposal from oil and gas exploration and production operations. Attached is an example list of exempt and non-exempt oil and gas exploration and production wastes along with a flow chart for determining the status of a waste.

The operator is only authorized to inject Class II fluids into a saltwater disposal well. Class II fluids are generally defined as follows:

1. Produced water from oil and gas production.
2. Waste fluids from actual drilling operations.
3. Used workover, completion, and stimulation fluids recovered from production, injection, and exploratory wells.
4. Waste fluids from circulation during well cementing.
5. Pigging fluids from cleaning of collection and injection lines within the field.
6. Enhanced recovery waters including fresh water makeup and other waters containing chemicals for the purpose of enhanced recovery.
7. Gases used for enhanced recovery/pressure maintenance of production reservoirs.
8. Brine reject from water softeners associated with enhanced recovery.
9. Waste oil and fluids from clean up within the oil field.
10. Waste water from gas plants which are an integral part of production operations unless those waters are classified as hazardous waste at the time of injection.

The following fluids are non-exempt fluids and are not authorized to be injected into a Class II saltwater disposal well:

1. Unused fracturing fluids or acids.
2. Vacuum truck and drum rinsate from trucks and drums containing non-exempt waste.
3. Refined gasoline or diesel fuels.
4. Used equipment lubricating oils.
5. Refinery wastes.
6. Radioactive tracer wastes.
7. Car wash wastes.

Please distribute this letter and the attachment to the appropriate personnel responsible for reporting on and monitoring each saltwater disposal well your company operates. If you have any questions, do not hesitate to contact me.

Sincerely,

Ashleigh Day
Underground Injection Supervisor

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)

SEP 2015
RECEIVED
ND OIL & GAS DIVISION

Well File No.
90329

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

Designate Type of Completion
☐ Oil Well ☐ EOR Well ☐ Recompletion ☐ Deepened Well ☐ Added Horizontal Leg ☐ Extended Horizontal Leg
☐ Gas Well ☑ SWD Well ☐ Water Supply Well ☐ Other:

Well Name and Number			Spacing Unit Description
Carson SWD 5301 12-24			
Operator		Telephone Number	Field
Oasis Petroleum North America		**(281) 404-9591**	**Baker**
Address			Pool
1001 Fannin, Suite 1500			**Dakota**
City	State	Zip Code	Permit Type
Houston	**TX**	**77002**	☐ Wildcat ☑ Development ☐ Extension

LOCATION OF WELL

At Surface	Qtr-Qtr	Section	Township	Range	County
584 F N L 2477 F W L	**NENW**	**24**	**153 N**	**101 W**	**McKenzie**

Spud Date	Date TD Reached	Drilling Contractor and Rig Number	KB Elevation (Ft)	Graded Elevation (Ft)
April 13, 2015	**April 19, 2015**	**Nabors B27**	**2109**	**2084**

Type of Electric and Other Logs Run (See Instructions)
MWD/GR from surface to TD

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

Well Bore	String 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**	**9 5/8**	**0**	**2210**	**13 1/2**	**36**			**812**	**0**
Vertical Hole	**Intermediate**	**7**	**0**	**7193**	**8 3/4**	**32**			**835**	**2180**

PERFORATION & OPEN HOLE INTERVALS

Well Bore	Well Bore TD Drillers Depth (MD Ft)	Completion Type	Open Hole/Perforated Interval (MD,Ft) Top	Bottom	Kick-off Point (MD Ft)	Top of Casing Window (MD Ft)	Date Perf'd or Drilled	Date Isolated	Isolation Method	Sacks Cement
Lateral1	**7217**	**Perforations**	**5950**	**7080**	**4695**		**05/01/2015**			

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-								
Date Well Completed (SEE INSTRUCTIONS)		Producing Method		Pumping-Size & Type of Pump			Well Status (Producing or Shut-In)	
June 18, 2015								
Date of Test	Hours Tested	Choke Size	Production for Test	Oil (Bbls)	Gas (MCF)	Water (Bbls)	Oil Gravity-API (Corr.)	Disposition of Gas
		/64					°	
Flowing Tubing Pressure (PSI)		Flowing Casing Pressure (PSI)		Calculated 24-Hour Rate	Oil (Bbls)	Gas (MCF)	Water (Bbls)	Gas-Oil Ratio

GEOLOGICAL MARKERS

Formation	MD (Ft)	TVD (Ft)
Greenhorn	**4639**	**4639**
Mowry	**5052**	**5041**
Newcastle	**5186**	**5157**
Dakota	**5696**	**5464**

PLUG BACK INFORMATION

Well Bore	Type of Plug	Top (Ft)	Bottom (Ft)	Sacks Cement

CORES CUT

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

Drill Stem Test

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

Well Specific Stimulations

Date Stimulated	Stimulated Formation	Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
						Barrels

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

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 report has been amended to correct the MD of the Dakota top.

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 **09/23/2015**
Signature	Printed Name **Jennifer Swenson**	Title **Regulatory Specialist**	

RYAN DIRECTIONAL SERVICES, INC.
A NABORS COMPANY

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

Monday, April 27, 2015

State of North Dakota

Subject: **Surveys**

Re: **Oasis**
Carson SWD 5301 12-24
McKenzie, ND

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

Surveyor Name	*Surveyor Title*	*Borehole Number*	*Start Depth*	*End Depth*	*Start Date*	*End Date*	*Type of*	*TD Straight Line Projection*
Daniel Ogden	MWD Operator	O.H.	2210'	7163'	04/15/15	04/18/15	MWD	7217'

If any other information is required please contact the undersigned at the letterhead address or phone number.

Douglas Hudson

Douglas Hudson
Well Planner

RYAN DIRECTIONAL SERVICES, INC.
A NABORS COMPANY

Ryan Directional Services, Inc.
19510 Oil Center Blvd.
Houston, Texas 77073
Bus: 281.443.1414
Fax: 281.443.1676

Saturday, April 18, 2015

State of North Dakota
County of McKenzie

Subject: **Survey Certification Letter**

Survey Company:	**Ryan Directional Services, Inc.**		
Job Number:	**8858**	Surface:	**404279.54 N, 1206936.03 E**
Survey Job Type:	**Ryan MWD**	A.P.I. No:	**33-053-90329**
Customer:	**Oasis Petroleum**	Location:	**McKenzie, North Dakota**
Well Name:	**Carson SWD 5301 12-24**	RKB Height:	**2109'**
Rig Name:	**Nabors B27**	Distance to Bit:	**54'**

Surveyor Name	*Surveyor Title*	*Borehole Number*	*Start Depth*	*End Depth*	*Start Date*	*End Date*	*Type of*	*TD Straight Line Projection*
Daniel Ogden	MWD Supervisor	OH	2273'	7163'	04/14/15	04/18/15	MWD	7217'

The data and calculations for this survey have been checked by me and conform to the calibration standards and operational procedures set forth by Ryan Directional Services, Inc. I am authorized and qualified to review the data, calculations and these reports; the reports represents true and correct Directional Surveys of this well based on the original data, the minimum curvature method, corrected to True North and obtained at the well site.

Daniel Ogden
MWD Supervisor
Ryan Directional Services, Inc.

Report #: 1
Date: 18-Apr-15

RYAN DIRECTIONAL SERVICES, INC.
A NABORS COMPANY

Ryan Job # 8858

SURVEY REPORT

Customer: Oasis Petroleum
Well Name: Carson SWD 5301 12-24
Rig #: Nabors B27
API #: 33-053-90329
Calculation Method: Minimum Curvature Calculation

MWD Operator: D. Foley / D. Ogden
Directional Drillers: RPM
Survey Corrected To: True North
Vertical Section Direction: 180
Total Correction: 8.20
Temperature Forecasting Model (Chart Only): Logarithmic

Survey #	MD	Inc	Azm	Temp	TVD	VS	N/S	E/W	DLS
Tie in to Gyro Surveys									
Tie In	**2210**	**0.00**	**0.00**	**0.00**	**2210.00**	**0.00**	**0.00**	**0.00**	**0.00**
1	2273	0.80	270.10	84.00	2273.00	0.00	0.00	-0.44	1.27
2	2367	1.10	265.20	91.00	2366.98	0.07	-0.07	-2.00	0.33
3	2461	1.20	260.70	91.00	2460.97	0.31	-0.31	-3.87	0.14
4	2556	1.40	256.40	91.00	2555.94	0.74	-0.74	-5.98	0.23
5	**2650**	**1.70**	**261.60**	**95.00**	**2649.91**	**1.22**	**-1.22**	**-8.47**	**0.35**
6	2744	2.20	264.10	96.00	2743.85	1.60	-1.60	-11.64	0.54
7	2838	0.60	208.20	102.00	2837.82	2.22	-2.22	-13.67	2.05
8	2932	1.10	175.00	104.00	2931.81	3.56	-3.56	-13.83	0.73
9	3026	1.00	182.80	105.00	3025.80	5.27	-5.27	-13.79	0.19
10	**3121**	**0.80**	**205.50**	**107.00**	**3120.79**	**6.70**	**-6.70**	**-14.11**	**0.43**
11	3215	0.80	203.10	107.00	3214.78	7.90	-7.90	-14.65	0.04
12	3309	1.00	211.40	109.00	3308.77	9.20	-9.20	-15.34	0.25
13	3404	1.00	220.10	111.00	3403.75	10.54	-10.54	-16.30	0.16
14	3498	0.40	256.10	113.00	3497.74	11.25	-11.25	-17.15	0.76
15	**3592**	**0.40**	**271.50**	**114.00**	**3591.74**	**11.32**	**-11.32**	**-17.80**	**0.11**
16	3686	0.60	263.90	116.00	3685.74	11.36	-11.36	-18.62	0.22
17	3780	0.30	179.40	118.00	3779.74	11.66	-11.66	-19.10	0.69
18	3874	0.40	186.70	120.00	3873.73	12.23	-12.23	-19.14	0.12
19	3969	0.40	189.50	122.00	3968.73	12.89	-12.89	-19.23	0.02
20	**4063**	**0.30**	**6.60**	**123.00**	**4062.73**	**12.97**	**-12.97**	**-19.26**	**0.74**
21	4157	0.50	12.00	123.00	4156.73	12.32	-12.32	-19.14	0.22
22	4251	0.40	325.50	125.00	4250.73	11.65	-11.65	-19.24	0.39
23	4346	0.40	279.60	127.00	4345.72	11.32	-11.32	-19.76	0.33
24	4440	0.60	265.70	129.00	4439.72	11.31	-11.31	-20.57	0.25
25	**4534**	**0.70**	**265.40**	**125.00**	**4533.71**	**11.39**	**-11.39**	**-21.64**	**0.11**
26	4628	0.90	260.00	127.00	4627.71	11.56	-11.56	-22.94	0.23
27	4646	0.90	267.50	127.00	4645.70	11.59	-11.59	-23.22	0.65
28	4665	0.80	270.70	105.00	4664.70	11.60	-11.60	-23.50	0.58
29	4696	1.50	213.00	105.00	4695.70	11.94	-11.94	-23.94	4.09
30	**4727**	**4.50**	**188.80**	**105.00**	**4726.65**	**13.48**	**-13.48**	**-24.34**	**10.30**
31	4759	9.40	184.20	111.00	4758.41	17.33	-17.33	-24.73	15.40
32	4790	12.50	183.90	114.00	4788.84	23.20	-23.20	-25.14	10.00
33	4821	13.00	183.30	116.00	4819.07	30.03	-30.03	-25.57	1.67
34	4853	13.80	178.30	118.00	4850.20	37.44	-37.44	-25.66	4.40
35	**4884**	**14.10**	**175.90**	**120.00**	**4880.29**	**44.90**	**-44.90**	**-25.28**	**2.10**
36	4915	14.30	174.10	122.00	4910.34	52.47	-52.47	-24.62	1.56
37	4946	14.50	173.70	122.00	4940.37	60.14	-60.14	-23.80	0.72
38	4978	16.40	178.90	123.00	4971.21	68.64	-68.64	-23.27	7.34
39	5009	19.50	184.60	123.00	5000.70	78.17	-78.17	-23.60	11.48
40	**5041**	**22.50**	**187.40**	**125.00**	**5030.57**	**89.57**	**-89.57**	**-24.82**	**9.88**
41	5072	25.40	186.70	129.00	5058.90	102.06	-102.06	-26.36	9.40
42	5103	28.30	184.70	129.00	5086.56	115.99	-115.99	-27.74	9.80
43	5135	31.40	183.80	131.00	5114.31	131.87	-131.87	-28.91	9.79
44	5166	34.10	182.80	131.00	5140.38	148.61	-148.61	-29.87	8.88
45	**5197**	**36.40**	**181.90**	**131.00**	**5165.69**	**166.49**	**-166.49**	**-30.60**	**7.61**
46	5229	36.60	181.30	131.00	5191.42	185.52	-185.52	-31.13	1.28
47	5260	38.60	180.50	131.00	5215.98	204.43	-204.43	-31.43	6.64
48	5292	42.70	179.20	129.00	5240.25	225.27	-225.27	-31.36	13.08
49	5323	44.70	178.60	129.00	5262.66	246.68	-246.68	-30.95	6.59
50	**5355**	**46.90**	**178.90**	**129.00**	**5284.97**	**269.61**	**-269.61**	**-30.45**	**6.91**
51	5386	49.50	178.40	129.00	5305.63	292.71	-292.71	-29.91	8.47
52	5417	52.20	178.40	129.00	5325.20	316.74	-316.74	-29.23	8.71
53	5449	53.00	178.50	131.00	5344.64	342.15	-342.15	-28.55	2.51
54	5480	52.60	178.80	129.00	5363.38	366.84	-366.84	-27.96	1.50
55	**5512**	**54.30**	**178.40**	**129.00**	**5382.43**	**392.54**	**-392.54**	**-27.34**	**5.41**
56	5543	57.10	178.00	129.00	5399.90	418.13	-418.13	-26.53	9.09
57	5575	60.40	178.40	129.00	5416.50	445.47	-445.47	-25.67	10.37
58	5606	64.10	179.80	129.00	5430.93	472.90	-472.90	-25.25	12.59
59	5637	67.70	181.30	129.00	5443.59	501.19	-501.19	-25.52	12.42
60	**5669**	**70.90**	**181.80**	**129.00**	**5454.90**	**531.11**	**-531.11**	**-26.34**	**10.11**

Report #: 1
Date: 18-Apr-15

RYAN DIRECTIONAL SERVICES, INC.
A NABORS COMPANY

Ryan Job # 8858

SURVEY REPORT

Customer: Oasis Petroleum
Well Name: Carson SWD 5301 12-24
Rig #: Nabors B27
API #: 33-053-90329
Calculation Method: Minimum Curvature Calculation

MWD Operator: D. Foley / D. Ogden
Directional Drillers: RPM
Survey Corrected To: True North
Vertical Section Direction: 180
Total Correction: 8.20
Temperature Forecasting Model (Chart Only): Logarithmic

Survey #	MD	Inc	Azm	Temp	TVD	VS	N/S	E/W	DLS
61	5764	72.10	181.30	122.00	5485.04	621.16	-621.16	-28.77	1.36
62	5858	71.50	179.90	129.00	5514.40	710.45	-710.45	-29.71	1.55
63	5952	72.10	179.70	131.00	5543.76	799.75	-799.75	-29.40	0.67
64	6047	71.40	178.50	132.00	5573.51	889.96	-889.96	-27.98	1.41
65	**6141**	**70.30**	**178.50**	**134.00**	**5604.35**	**978.72**	**-978.72**	**-25.66**	**1.17**
66	6235	70.00	178.40	134.00	5636.27	1067.11	-1067.11	-23.26	0.33
67	6329	69.90	178.50	134.00	5668.50	1155.38	-1155.38	-20.88	0.15
68	6424	71.30	178.20	136.00	5700.05	1244.94	-1244.94	-18.29	1.50
69	6518	71.20	178.20	134.00	5730.26	1333.91	-1333.91	-15.50	0.11
70	**6611**	**72.30**	**178.40**	**138.00**	**5759.39**	**1422.19**	**-1422.19**	**-12.88**	**1.20**
71	6705	72.80	178.40	140.00	5787.58	1511.83	-1511.83	-10.38	0.53
72	6799	69.80	178.40	141.00	5817.71	1600.82	-1600.82	-7.89	3.19
73	6894	71.10	178.40	143.00	5849.50	1690.31	-1690.31	-5.39	1.37
74	6988	71.80	178.00	143.00	5879.40	1779.38	-1779.38	-2.59	0.85
75	**7082**	**72.80**	**177.70**	**143.00**	**5907.98**	**1868.87**	**-1868.87**	**0.77**	**1.11**
76	7163	69.10	178.30	145.00	5934.42	1945.37	-1945.37	3.45	4.62
Projection	7217	69.10	178.30	145.00	5953.68	1995.80	-1995.80	4.94	0.00

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.
90329

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

Designate Type of Completion
☐ Oil Well ☐ EOR Well ☐ Recompletion ☐ Deepened Well ☐ Added Horizontal Leg ☐ Extended Horizontal Leg
☐ Gas Well ☑ SWD Well ☐ Water Supply Well ☐ Other:

Well Name and Number			Spacing Unit Description
Carson SWD 5301 12-24			
Operator		Telephone Number	Field
Oasis Petroleum North America		**(281) 404-9591**	**Baker**
Address			Pool
1001 Fannin, Suite 1500			**Dakota**
City	State	Zip Code	Permit Type
Houston	**TX**	**77002**	☐ Wildcat ☑ Development ☐ Extension

LOCATION OF WELL

At Surface	Qtr-Qtr	Section	Township	Range	County
584 F N L 2477 F W L	**NENW**	**24**	**153 N**	**101 W**	**McKenzie**

Spud Date	Date TD Reached	Drilling Contractor and Rig Number	KB Elevation (Ft)	Graded Elevation (Ft)
April 13, 2015	**April 19, 2015**	**Nabors B27**	**2109**	**2084**

Type of Electric and Other Logs Run (See Instructions)
MWD/GR from surface to TD

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

Well Bore	String 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**	**9 5/8**	**0**	**2210**	**13 1/2**	**36**			**812**	**0**
Vertical Hole	**Intermediate**	**7**	**0**	**7193**	**8 3/4**	**32**			**835**	**2180**

PERFORATION & OPEN HOLE INTERVALS

Well Bore	Well Bore TD Drillers Depth (MD Ft)	Completion Type	Open Hole/Perforated Interval (MD,Ft) Top	Bottom	Kick-off Point (MD Ft)	Top of Casing Window (MD Ft)	Date Perf'd or Drilled	Date Isolated	Isolation Method	Sacks Cement
Lateral1	**7217**	**Perforations**	**5950**	**7080**	**4695**		**05/01/2015**			

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-								
Date Well Completed (SEE INSTRUCTIONS)		Producing Method		Pumping-Size & Type of Pump			Well Status (Producing or Shut-In)	
June 18, 2015								
Date of Test	Hours Tested	Choke Size	Production for Test	Oil (Bbls)	Gas (MCF)	Water (Bbls)	Oil Gravity-API (Corr.)	Disposition of Gas
		/64					°	
Flowing Tubing Pressure (PSI)	Flowing Casing Pressure (PSI)		Calculated 24-Hour Rate	Oil (Bbls)	Gas (MCF)	Water (Bbls)	Gas-Oil Ratio	

GEOLOGICAL MARKERS

Formation	MD (Ft)	TVD (Ft)
Greenhorn	**4639**	**4639**
Mowry	**5052**	**5041**
Newcastle	**5186**	**5157**
Dakota	**8696**	**5464**

PLUG BACK INFORMATION

Well Bore	Type of Plug	Top (Ft)	Bottom (Ft)	Sacks Cement

CORES CUT

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

Drill Stem Test

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

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

Drill Pipe Recovery

Sample Chamber Recovery

Well Specific Stimulations

Date Stimulated	Stimulated Formation	Top (Ft)	Bottom (Ft)	Stimulation Stages	Volume	Volume Units
						Barrels

Type Treatment	Acid %	Lbs Proppant	Maximum Treatment Pressure (PSI)	Maximum Treatment Rate (BBLS/Min)
Sand Frac				

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

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 a preliminary completion report. A supplemental report will be filed upon first production of the well.

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 **06/25/2015**
Signature	Printed Name **Jennifer Swenson**	Title **Regulatory Specialist**	

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
JUN 2015
ND OIL & GAS DIVISION

Well File No.
90329

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

☐ Notice of Intent	Approximate Start Date	☐ Drilling Prognosis	☐ Spill Report
☑ Report of Work Done	Date Work Completed: **June 18, 2015**	☐ Redrilling or Repair	☐ Shooting
☐ 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	☐ Casing or Liner	☐ Acidizing
		☐ Plug Well	☐ Fracture Treatment
		☐ Supplemental History	☐ Change Production Method
		☐ Temporarily Abandon	☐ Reclamation
		☑ Other	**Injection Start Date for SWD Well**

Well Name and Number					
CARSON SWD 5301 12-24					
Footages: **584** F **N** L **2477** F **W** L	Qtr-Qtr: **NENW**	Section: **24**	Township: **153 N**	Range: **101 W**	
Field: **Baker**	Pool: **Dakota**	County: **McKenzie**			

24-HOUR PRODUCTION RATE

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

Name of Contractor(s)			
Address	City	State	Zip Code

DETAILS OF WORK

Oasis Petroleum North America, LLC respectfully informs the NDIC that first injection for the subject Salt Water Disposal Well occurred on June 18, 2015.

* Submit a Form 6 Well Completion Report (KCC)

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

FOR STATE USE ONLY

☑ Received *	☐ Approved
Date: 6/26/15	
By: Kevin Connors	
Title: KEVIN CONNORS UNDERGROUND INJECTION SUPERVISOR	

Well Integrity Report - Form 19 Summary

INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
600 EAST BOULEVARD DEPT 405
BISMARCK, ND 58505-0840

Well File No. 90329
UIC No. W0437S0919D

Test Date:	5/5/2015 11:13:32 AM	**Contractor Performing Pressure Test:**	Castle Oilfield Service				
Operator:	OASIS PETROLEUM NORTH AMERICA LLC			**Telephone :**	2814049500		
Address:	1001 FANNIN STE 1500	**City:**	HOUSTON	**State:**	TX	**Zip Code:**	77002
Well Name:	CARSON SWD 5301 12-24			**Field:**	BAKER		
Location:	**Qtr-Qtr:** NENW	**Section:** 24	**Township:** 153	**Range:** 101	**Cnty:** MCKENZIE		

WELL TEST DATA

Formation:	DAKOTA	**Perforations:**	5950 - 7080 *Feet*
Tool Type:	PKR **Depth:** 5821 *Feet*	**Packer Model:**	Nickle plated Arrowset
Tubing Size:	4.5 *Inches*	**Tubing Type:**	11.6 # J-55 Polycore
Well Type:	Disposal Well **Reason for Test:**	UIC MIT	**Test Type :** Initial MIT

	BEFORE TEST	**START of TEST**	**END of TEST**
Tubing Pressure:	0 *PSIG* Shut In	0 *PSIG* Shut In	0 *PSIG* Shut In
Annulus or Casing Pressure:	0 *PSIG*	1000 *PSIG*	960 *PSIG*

Annulus or Casing Fluid : Treated Salt Water **Test Fluid:** Treated Salt Water

Amount of Fluid Needed to Fill Annulus or Casing: 1.25 *Bbls*

Test Length: 15 *Minutes* **Was Annulus or Casing Bled to Zero After Test?:** Yes **If No - Pressure Left:**

INSPECTION COMMENTS

Test Result: Acceptable **Report of Work Done Required:** Yes

MIT passed. Perfs, 7040-7010, 6970-7010, 6879-6894, 6820-6840, 6664-6679, 6597-6612, 6140-6170, 5950-5990. Pressure test three times.

Submit Form 6 Completion Report. Due within 30 days after well completion (KCC)
Submit Form 4 Sundry Notice date of first injection when applicable (KCC)

This Report is true and complete to the best of my knowledge.

Company Representative Witnessing Test: Josh Trowbridge **Title:** Rig Supervisor

Commission Field Inspector Witnessing Test: Richard Ryan

NDIC Initials KCC

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)

MAR 2015
RECEIVED
ND OIL & GAS
DIVISION

Well File No.
90329

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

☑ Notice of Intent	Approximate Start Date **April 15, 2015**	☐ Drilling Prognosis	☐ Spill Report
☐ Report of Work Done	Date Work Completed	☐ Redrilling or Repair	☐ Shooting
☐ 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	☐ Casing or Liner	☐ Acidizing
		☐ Plug Well	☐ Fracture Treatment
		☐ Supplemental History	☐ Change Production Method
		☐ Temporarily Abandon	☐ Reclamation
		☑ Other **Change to Original APD**	

Well Name and Number
Carson SWD 5301 12-24

Footages	Qtr-Qtr	Section	Township	Range
584 F **N** L **2477** F **W** L	**NENW**	**24**	**153 N**	**101 W**

Field	Pool	County
Baker	**Dakota**	**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 approval to make the following changes to the above permit:

Surface casing design:
Intermediate Casing of 7" with weight of 32# (previously weight 26#)

Company **Oasis Petroleum North America LLC**		Telephone Number **(281) 404-9500**
Address **1001 Fannin Suite 1500**		
City **Houston**	State **TX**	Zip Code **77002**
Signature	Printed Name **Victoria Siemieniewski**	
Title **Regulatory Specialist**	Date **March 23, 2015**	
Email Address **vsiemieniewski@oasispetroleum.com**		

FOR STATE USE ONLY

☐ Received	☑ Approved
Date	3/30/2015
By	
Title	KEVIN CONNORS UNDERGROUND INJECTION SUPERVISOR

NORTH DAKOTA
OIL AND GAS DIVISION

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/

PERMIT FOR FLUID INJECTION

OPERATOR: Oasis Petroleum North America, LLC

ADDRESS: 1001 Fannin, Suite 1500 Houston, TX 77002

WELL NAME & NO.: Carson SWD 5301 12-24

LOCATION: NENW Section 24, T153N, R101W McKenzie County, ND

AUTHORIZED INJECTION ZONE: Dakota Group

UNDERGROUND INJECTION CONTROL (UIC) NO.: W0437S0919D

WELL FILE NO.: 90329

PERMIT DATE: March 20, 2015

The operator shall notify the North Dakota Industrial Commission ("Commission") at least 24 hours prior to plugging back and converting said well to a saltwater disposal well. This permit is conditioned upon the operator complying with the provisions set forth in Chapter 43-02-05, Chapter 43-02-03, any other applicable rules or orders of the Commission, and the following stipulations:

(1) Effective June 1, 2014, all operators of disposal wells in North Dakota will be required to maintain an on-site container to store filters until they can be properly disposed of in an authorized facility. Such containers must be:

- Leak-proof to prevent any fluids from escaping
- Covered to prevent precipitation from entering the container
- Labeled to indicate only filters are to be placed in the container

(2) The operator shall obtain approval on plug-back procedure prior to converting said well to a saltwater disposal well.

(3) The injection interval shall be isolated by cement and verified by a cement bond log prior to injecting fluids.

(4) Injection shall be through tubing and packer set within 100 feet of the top perforation.

(5) A Commission Field Inspector must witness a satisfactory mechanical integrity test on the tubing-casing annulus prior to injecting fluids.

(6) Accurate pressure gauges shall be placed on the tubing and on the tubing-casing annulus.

(7) Written notice must be given of the date of first injection immediately and of any discontinuance within ten days. Written notice must also be given of the date injection recommences.

(8) All fluids injected shall be metered or measured using an approved method.

(9) The operator is only authorized to inject Class II fluids into said well. Class II fluids are generally defined as follows:

a. Produced water from oil and gas production;
b. Waste fluids from actual drilling operations;
c. Used workover, completion, and stimulation fluids recovered from production, injection and exploratory wells;
d. Waste fluids from circulation during well cementing;
e. Pigging fluids from cleaning of collection and injection lines within the field;
f. Enhanced recovery waters including fresh water makeup and other waters containing chemicals for the purpose of enhanced recovery;
g. Gases used for enhanced recovery/pressure maintenance of production reservoirs;
h. Brine reject from water softeners associated with enhanced recovery;
i. Waste oil and fluids from clean up within the oil field;
j. Waste water from gas plants which are an integral part of production operations unless those waters are classified as hazardous waste at the time of injection.

(10) Copies of all logs run hereinafter and a Sundry Notice (Form 4) detailing the conversion of this well must be submitted to the Commission within 30 days after the completion of the conversion. 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. The Sundry Notice shall include, but not be limited to, the following information: work completed and depths to plug back well, plug back depth, details of any isolation squeezes, perforated interval, packer type and depth, tubing size and type, and any other remedial work done as well as the dates the work was performed

(11) The operator shall report any noncompliance with regulations or permit conditions within 24 hours followed by a written explanation within five days.

(12) Approval shall be obtained prior to attempting any remedial work to the casing strings.

(13) Following any remedial work done to this well over the life of this well, a Sundry Notice (Form 4) must be submitted detailing the work done. This report shall include the reason for the workover, the work done, dates, size and type of tubing, type and location of packer, result of pressure test, and any other pertinent data.

(14) Following the completion of any remedial work, the Director is authorized to order further mechanical integrity tests or other remedial work as deemed necessary to insure the mechanical integrity of the well and to prevent the movement of injected fluids into an underground source of drinking water or a zone other than authorized herein.

(15) The operator shall report monthly, regardless of the status of the operations, the amount of any fluid injected, the sources thereof, and the average injection pressure. The reports (Forms 16 and 16A) shall be filed with the Director on or before the fifth day of the second month following that in which injection occurred or could have occurred.

(16) If oil is recovered from the disposal operations, the operator shall report monthly, regardless of the status of the operations, the amount of oil recovered and sold, and the purchaser of said oil. The reports (Form 5 SWD) shall be filed with the Director on or before the 1st day of the second succeeding month.

(17) The well and injection system shall be kept under continuing surveillance.

(18) Operations shall cease immediately if so directed by the Director or one of his representatives.

(19) The operator shall conduct tests and install monitoring equipment as prescribed by the Director to verify the integrity of the surface facility, gathering system and injection well and to insure that the surface and subsurface potable waters will be protected.

(20) All fires, breaks, leaks, spills, or other accidents of this nature shall be reported to the Oil and Gas Division pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-30.

(21) The Director is hereby authorized to issue administrative orders to include such other terms and conditions as may be necessary to insure proper compliance with the provisions of North Dakota Century Code Chapter 38-08 of the and NDAC Chapter 43-02-05 and 43-02-03. The Director is further authorized to immediately order the well shut-in if mechanical failure or downhole problems indicate that injected fluids are, or may be, moving into a zone other than authorized herein, or if the operator of the well fails to comply with the statutes, rules, orders of the Commission or written or oral directives of the Commission or its staff.

(22) Unless the well is converted to a saltwater disposal well by March 20, 2016, this permit shall expire and be of no further force and effect.

(23) If the authorized injection zone is plugged and abandoned, this permit shall expire and be of no further force and effect.

This permit is effective the date set forth below and is transferable only upon approval of the Commission.

Dated this 20th day of March, 2015.

North Dakota Industrial Commission
Oil and Gas Division
Lynn D. Helms
Director

By: _____
Kevin C. Connors
UIC Supervisor

UIC PERMIT CHECKLIST

Well File No. **90329**

Operator	Well Name			Date Received
Oasis Petroleum	**Carson SWD 5301 12-24**			**December 12, 2014**
Location of Well: **584 F N L 2477 F W L**	Qtr-Qtr: **NENW**	Section: **24**	Township: **153 N**	Range: **101 W**	County: **McKenzie**
Field: **Baker**	Current Pool: **Dakota**			Current Status: **Proposed**
Logs on File: **none**	Top of Cement: **2159** Feet	TOC Determined By and Date: ☑ CBL ☐ Temp ☐ Calc		
Injection Zone: **Dakota (Inyan Kara)**	Top: **5421** Feet	Confining Zone: **Mowry**		Thickness: **153** Feet

x	1.	Operator and well on bond as listed.
x	2.	Completed Form 14.
		Estimated frac pressure of confining zone. **4337** psi, gradient **0.8** psi/ft.
		Maximum injection rate and pressure. **15000** bpd @ **1450** psi.
		K_{FH}base **1987** Feet.
x	3.	Lithology of proposed injection zone and confining zones.*
x	4.	Map of area of review.
x	5.	Name and location of wells in area of review.
x	6.	Corrective action on wells in area of review.
x	7.	Injection program.*
x	8.	x a. Analysis from state certified lab of two nearest fresh water wells.*
		____ b. For units listed below: name and location of two nearest fresh water wells.
		____ c. For units listed below: analysis from state certified lab of any new fresh water wells.
x	9.	Analysis from state certified lab of injection fluid.*
x	10.	List of source wells.*
x	11.	Landowner description within area of review.*
x	12.	Certification of notification of landowners and letter sent.*
na	13.	Logs and test data if not previously submitted.
x	14.	Drawing of current* and proposed well bore and surface construction.*
x	15.	Dike Schematic
x	16.	Traffic Flow Diagram
x	17.	Sundry detailing conversion procedure.
x	18.	Form 1
x	19.	Shallow aquifer check.
x	20.	Legal Street Address Requested

Date Landowner Notified: **December 2, 2014**

Note: " * " indicates that the item is not required for EOR wells in the Cedar Creek, Cedar Hills North, Medicine Pole Hills South, Mohall, and Wiley units.

Hearing

Hearing Date	Case No.	Order No.	Permit Date	UIC Number
January 21, 2015	**23553**	**25893**	**March 20, 2015**	**W0437S0919D**

Administrative

Order No. Allowing Injection	Permit Date	UIC Number
na	**na**	**na**

Permit Approved By: **Kevin Connors** (Initials): KCC

AREA OF REVIEW DATA SHEET

(WELLS WITHIN 1/4 MILE RADIUS PENETRATING INJECTION ZONE)

(05-2000)

Well File No.
90329

Well Name and Number					Number of Wells in AOR
Carson SWD 5301 12-24					4
Footages	Qtr-Qtr	Section	Township	Range	County
584 F N L 2477 F W L	NENW	24	153 N	101 W	McKenzie
Field		Injection Zone			Injection Zone Top
Baker		Dakota (Inyan Kara)			5421 Feet

AREA OF REVIEW WELLS

Well Name and Number				Status	Status Date	Well File No.
Yukon #5301 41-12T				A	9/9/2013	22099
Footages	Qtr-Qtr	Section	Township	Range	County	
255 F S L 710 F W L	SWSW	12	153 N	101 W	McKenzie	

Surface Casing	Surface Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By
9 5/8 "	2127 Feet	747 Sacks	0	Visual
Production Casing	**Production Casing Depth**	**Cement Volume**	**Top of Cement**	**Top of Cement Determined By**
7 "	11126 Feet	794 Sacks	2563 Feet	☑ CBL ☐ Temp ☐ Calc
Injection Zone	**Injection Zone Top**	**Pierre Shale Top**	**Logs on File**	
Three Forks	10794 Feet	1986 Feet	CBL, CIL, DTSM	

Comments

Three Forks Lateral leg in AOR - Geological isolation from injection zone

Well Name and Number				Status	Status Date	Well File No.
Jefferies #5301 43-12B				A	3/22/2012	22220
Footages	Qtr-Qtr	Section	Township	Range	County	
250 F S L 2510 F E L	SWSW	12	153 N	101 W	McKenzie	

Surface Casing	Surface Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By
9 5/8 "	2170 Feet	630 Sacks	0	Visual
Production Casing	**Production Casing Depth**	**Cement Volume**	**Top of Cement**	**Top of Cement Determined By**
7 "	11093 Feet	755 Sacks	3236 Feet	☑ CBL ☐ Temp ☐ Calc
Injection Zone	**Injection Zone Top**	**Pierre Shale Top**	**Logs on File**	
Bakken	10740 Feet	2018 Feet	CBL, DTSM	

Comments

Middle Bakken Lateral leg in AOR - Geological isolation from injection zone

Well Name and Number				Status	Status Date	Well File No.
Innoko #5301 43-12T				A	9/18/2013	22221
Footages	Qtr-Qtr	Section	Township	Range	County	
250 F S L 2350 F E L	SWSE	12	153 N	101 W	McKenzie	

Surface Casing	Surface Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By
9 5/8 "	2152 Feet	691 Sacks	0	Visual
Production Casing	**Production Casing Depth**	**Cement Volume**	**Top of Cement**	**Top of Cement Determined By**
7 "	11117 Feet	793 Sacks	3330 Feet	☑ CBL ☐ Temp ☐ Calc
Injection Zone	**Injection Zone Top**	**Pierre Shale Top**	**Logs on File**	
Three Forks	10811 Feet	2002 Feet	CBL, CIL, DTSM	

Comments

Three Forks Lateral leg in AOR - Geological isolation from injection zone

AREA OF REVIEW DATA SHEET

(WELLS WITHIN 1/4 MILE RADIUS PENETRATING INJECTION ZONE)

(05-2000)

Well File No.
90329

Well Name and Number						Number of Wells in AOR
Carson SWD 5301 12-24						4
Footages	Qtr-Qtr	Section	Township	Range		County
584 F N L 2477 F W L	NENW	24	153 N	101 W		McKenzie
Field		Injection Zone				Injection Zone Top
Baker		Dakota (Inyan Kara)				5421 Feet

AREA OF REVIEW WELLS

Well Name and Number				Status	Status Date	Well File No.
Bray #5301 43-12H				A	1/13/2012	20864
Footages	Qtr-Qtr	Section	Township	Range		County
250 F S L 1927 F E L	SWSE	12	153 N	101 W		McKenzie
Surface Casing	Surface Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By		
9 5/8 "	2089 Feet	605 Sacks	0	Visual		
Production Casing	Production Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By		
7 "	11071 Feet	785 Sacks	3165 Feet	☑ CBL ☐ Temp ☐ Calc		
Injection Zone	Injection Zone Top	Pierre Shale Top	Logs on File			
Bakken	10719 Feet	1990 Feet	CBL, DTSM, HDL, HRL, HSL			
Comments						
Middle Bakken Lateral leg in AOR - Geological isolation from injection zone						

Well Name and Number				Status	Status Date	Well File No.
Footages	Qtr-Qtr	Section	Township	Range		County
F L F L			N	W		
Surface Casing	Surface Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By		
"	Feet	Sacks				
Production Casing	Production Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By		
"	Feet	Sacks	Feet	☑ CBL ☐ Temp ☐ Calc		
Injection Zone	Injection Zone Top	Pierre Shale Top	Logs on File			
	Feet	Feet				
Comments						

Well Name and Number				Status	Status Date	Well File No.
Footages	Qtr-Qtr	Section	Township	Range		County
F L F L			N	W		
Surface Casing	Surface Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By		
"	Feet	Sacks				
Production Casing	Production Casing Depth	Cement Volume	Top of Cement	Top of Cement Determined By		
"	Feet	Sacks	Feet	☑ CBL ☐ Temp ☐ Calc		
Injection Zone	Injection Zone Top	Pierre Shale Top	Logs on File			
	Feet	Feet				
Comments						

APPLICATION FOR INJECTION - FORM 14

INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
600 EAST BOULEVARD DEPT 405
BISMARCK, ND 58505-0840
SFN 18669 (08-2012)

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM. PLEASE SUBMIT THE ORIGINAL AND TWO COPIES.
APPROVAL MUST BE OBTAINED BEFORE WORK COMMENCES.

Permit Type	Injection Well Type	Commercial SWD
☐ Enhanced Recovery ☑ Saltwater Disposal ☐ Gas Storage	☐ Converted ☑ Newly Drilled	☐ Yes ☑ No

Operator	Telephone Number	Will Oil be Skimmed?
Oasis Petroleum North America LLC	**(281) 404-9500**	☑ Yes ☐ No

Address	City	State	Zip Code
1001 Fannin St, Suite 1500	**Houston**	**TX**	**77007**

Well Name and Number	Field or Unit
Carson SWD 5301 12-24	**Baker**

LOCATIONS

	At Surface	Qtr-Qtr	Section	Township	Range	County
	584 F **N** L **2477** F **W** L	**NENW**	**24**	**153 N**	**101 W**	**McKenzie**
Bottom Hole Location	**2584** F **N** L **2477** F **W** L	**NENW**	**24**	**153 N**	**101 W**	**McKenzie**

Geologic Name of Injection Zone	Top	Injection Interval
Dakota Group	**5421** Feet	**5736-7196 MD gross interval (5489-5863 TVD)** Feet

Geologic Name of Top Confining Zone	Thickness	Geologic Name of Bottom Confining Zone	Thickness
Skull Creek	**250** Feet	**Swift**	**350** Feet

Bottom Hole Fracture Pressure of the Top Confining Zone	Gradient
4337 PSI	**0.80** PSI/Ft

Estimated Average Injection Rate and Pressure	Estimated Maximum Injection Rate and Pressure
10000 BPD @ 1000 PSI	**15000 BPD @ 1450** PSI

Geologic Name of Lowest Known Fresh Water Zone	Depth to Base of Fresh Water Zone
Fox Hill	**2059** Feet

Total Depth of Well (MD & TVD)	Logs Previously Run on Well
7254 MD, 5878 TVD Feet	**triple combo through mowry, GR/Res to BSC, GR to surf**

CASING, TUBING, AND PACKER DATA (Check If Existing)

NAME OF STRING	SIZE	WEIGHT (Lbs/Ft)	SETTING DEPTH	SACKS OF CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface ☑	**9 5/8"**	**36**	**2159**	**635**	**Surface**	**Visual**
Intermediate ☑	**7"**	**26**	**7254**	**509**	**BSC**	**CBL**
Long String ☐						

			TOP	BOTTOM	SACKS OF CEMENT
Liner ☐					

				TYPE
Proposed Tubing	**4 1/2"**	**10.5**	**5634**	**J-55 Sealite Coated**

Proposed Packer Setting Depth	Model		
5604 Feet	**Internally coated Baker lockset**	☑ Compression ☐ Tension	☐ Permanent

FOR STATE USE ONLY

Permit Number and Well File Number	
	90329
UIC Number: W04375091 9D	Approval Date: 3/20/2015
By: Kevin Connors	
Title: KEVIN CONNORS UNDERGROUND INJECTION SUPERVISOR	

COMMENTS

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records.		Date **February 24, 2015**
Signature	Printed Name **Victoria Siemieniewski**	Title **Regulatory Specialist**

Above Signature Witnessed By

Witness Signature	Witness Printed Name	Witness Title
	Chelsea Covington	**Regulatory Assistant**

Instructions

1. Attach a list identifying all attachments.
2. The operator, well name and number, field or unit, well location, and any other pertinent data shall coincide with the official records on file with the Commission. If it does not, an explanation shall be given.
3. If an injection well is to be drilled, an Application for Permit to Drill - Form 1 (SFN 4615) shall also be completed and accompanied by a plat prepared by a registered surveyor and a drilling fee.
4. Attach a lithologic description of the proposed injection zone and the top and bottom confining zones.
5. Attach a plat depicting the area of review (1/4-mile radius) and detailing the location, well name, and operator of all wells in the area of review. Include: injection wells, producing wells, plugged wells, abandoned wells, drilling wells, dry holes, and water wells. The plat shall also depict faults, if known or suspected.
6. Attach a description of the needed corrective action on wells penetrating the injection zone in the area of review.
7. Attach a brief description of the proposed injection program.
8. Attach a quantitative analysis from a state-certified laboratory of fresh water from the two nearest fresh water wells. Include legal descriptions.
9. Attach a quantitative analysis from a state-certified laboratory of a representative sample of water to be injected.
10. Attach a list identifying all source wells, including location.
11. Attach a legal description of land ownership within the area of review. List ownership by tract or submit in plat form.
12. Attach an affidavit of mailing certifying that all landowners within the area of review have been notified of the proposed injection well. This notice shall inform the landowners that comments or objections may be submitted to the Commission within 30 days, or that a hearing will be held at which comments or objections may be submitted, whichever is applicable. Include copies of letters sent.
13. Attach all available logging and test data on the well which has not been previously submitted.
14. Attach schematic drawings of the injection system including current well bore construction and proposed well bore and surface facility construction.
15. Attach a Sundry Notice - Form 4 (SFN 5749) detailing the proposed procedure.
16. Attach a diagram representing the traffic flow and the maximum number of trucks staged on site.
17. Attach a printout of a map obtained at http://www.nd.gov/gis/apps/HubExplorer/ with surficial aquifers (under hydrography) active, and proposed location plotted on printout.
18. Read Section 43-02-05-04 of the North Dakota Administrative Code to ensure that this application is complete.
19. The original and two copies of this application and attachments shall be filed with the Industrial Commission of North Dakota, Oil and Gas Division, 600 East Boulevard, Dept. 405, Bismarck, ND 58505-0840.

OASIS PETROLEUM

12/8/2014

Oasis Petroleum
1001 Fannin St.
Suite 1500
Houston, TX 77002

Kevin Connors
UIC/CCS Supervisor
North Dakota Industrial Commission
600 East Boulevard Avenue Dept. 405
Bismarck, ND 58505-0840

RE: **Carson SWD 5301 12-24**

Dear Mr. Connors:

Pursuant to NDCC 43-02-03-16, Oasis respectfully submits the **Carson 5301 SWD 12-24** well APD for your consideration. Included with the application are all necessary attachments; an itemized list is included on the following page.

This well is located in Section 24 of Township 153 N, Range 101 W. This location is part of Indian Hills, Baker field and is in a generally rural area. A regional map has been provided with this application. Additionally, there are no federal minerals associated with this well. The landowners, Wesley and Barbara Lindvig, have been fully apprised of Oasis' development plans. The drill cuttings and solids will be disposed of in an onsite pit. Liquids from the drilling process will be taken to an authorized disposal facility.

Please do not hesitate to contact me should you have any additional questions or concerns regarding this well. Thank you for your consideration.

Respectfully,

Michael Kukuk

Michael Kukuk
Regulatory Supervisor
281.404.9575
Oasis Petroleum

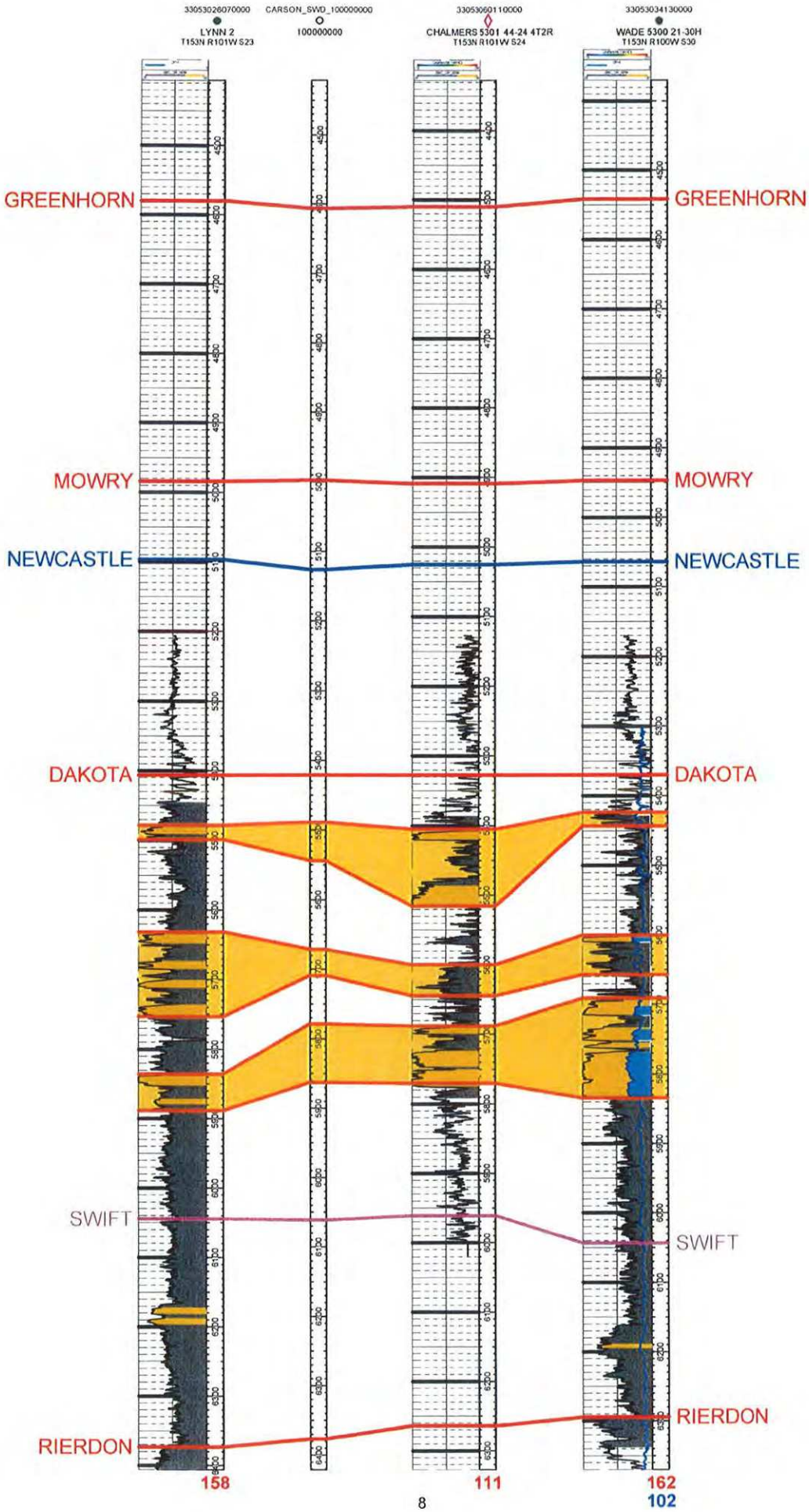
Lithologic Description

Well: **Carson SWD 5301 12-24**
Salt Water Disposal Well
McKenzie County, North Dakota
24-153N-101W

Injection Zone: The Cretaceous Inyan Kara within the Dakota is roughly 440' in this area based on the Oasis Petroleum Wade 5300 21-30H. The section consists of a sequence of alternating sand, silt and shale. Several potential injection zones occur between 5,501' and 5,943' based on the Oasis Petroleum Wade 5300 21-30H. These zones vary in thickness between 10' to 80'.

Upper Unit: Shales of the Skull Creek and Newcastle units confine the upper boundary of the Inyan Kara Formation. Individual shale units over 60' thick are inter-bedded with thinner siltstones.

Lower Unit: The Swift Shale consists of fine siltstones in the upper portion that grade into shales in the lower half of the unit. This formation spans 350' based on the Oasis Petroleum Wade 5300 21-30H.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LYNN 2
T153N R101W S23
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CHALMERS 5301 44-24 4T2R
T153N R101W S24
33053034130000
WADE 5300 21-30H
T153N R100W S30
GREENHORN
GREENHORN
MOWRY
MOWRY
NEWCASTLE
NEWCASTLE
DAKOTA
DAKOTA
SWIFT
SWIFT
RIERDON
RIERDON
158
111
162
102

Proposed Injection Program

November 25, 2014

Carson SWD 5301 12-24
Oasis Petroleum North America, LLC
Section 24, T153N R101W
McKenzie County, North Dakota

Application for Fluid Injection

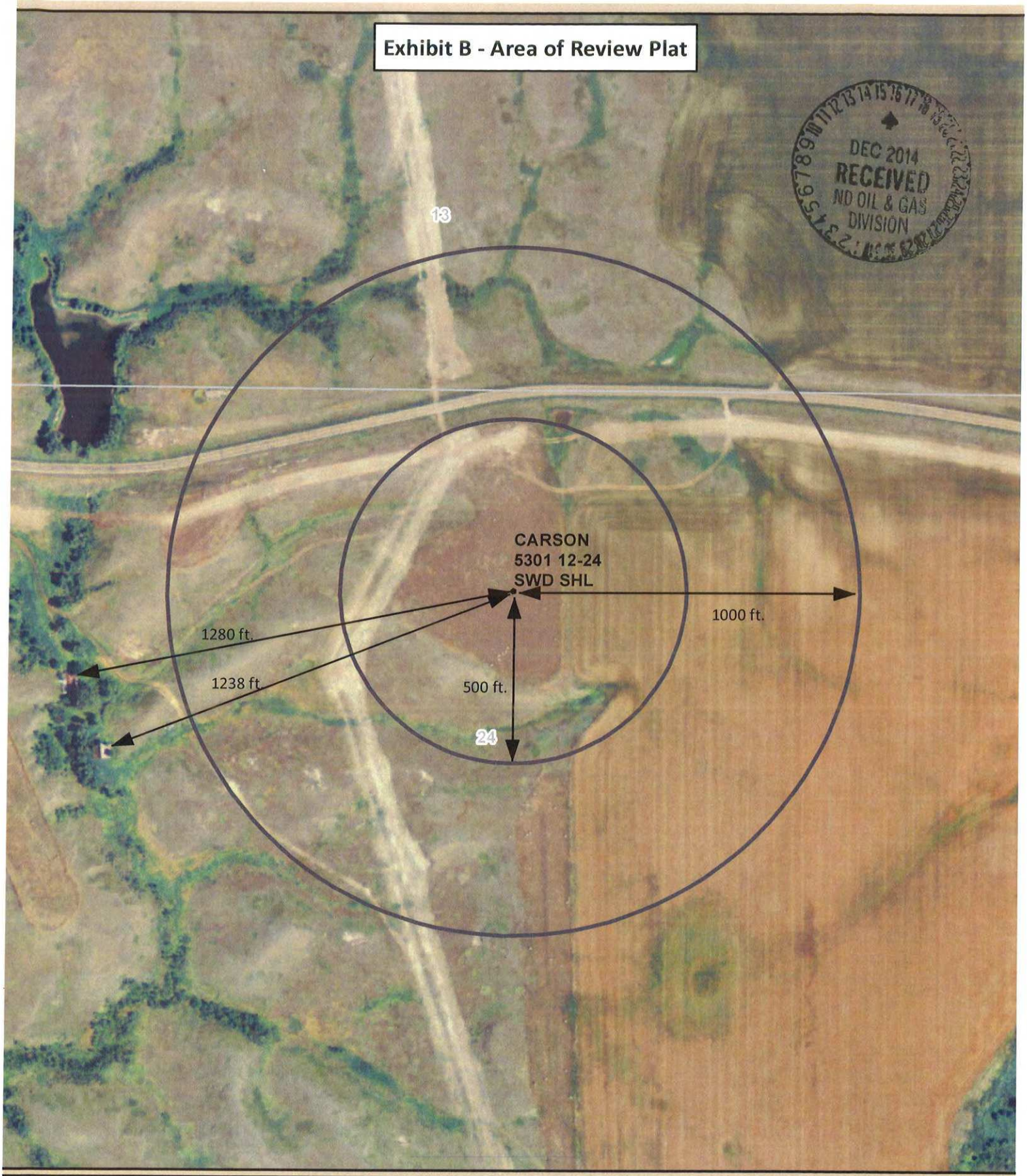
PROPOSED INJECTION PROGRAM

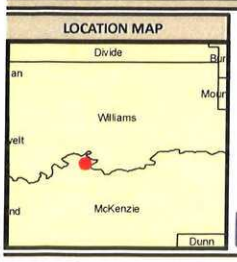
The Carson SWD 5301 12-24 well will be used to inject produced water from wells in the Baker Field-Oasis Bakken and Three Forks wells- already on production, in the process of completion, and those soon to be drilled in the four township area of 152-153N and 100-101W into the Dakota formation. Injection depths will be determined after the well is drilled and logged.

The source wells for the produced water are listed on Exhibit 6 but will also include additional Bakken and Three Forks wells yet to be drilled and completed. Water from these wells will be shipped via pipeline to the Carson SWD 5301 12-24 disposal site; trucking will only be done for emergency and/or unplanned circumstances. The amount of water injected into the Dakota is pressure dependent, but not to exceed ~~1,550~~ 1450 psig at surface.

The proposed Carson SWD 5301 12-24 is needed to provide a more local disposal facility in the area to reduce costs and ease the burden on regional disposal wells. The anticipated initial injection rate of the well will be 10,000 bwpd at 1,000 psig pressure. However, this rate may increase with additional drilling in the area, subject to the maximum pressure ceiling. and maximum daily injection rate. The maximum daily injection rate is based on diking dimensions around tanks. Pursuant to NDAC section 43-02-03-53 (3)(b).

Exhibit B - Area of Review Plat





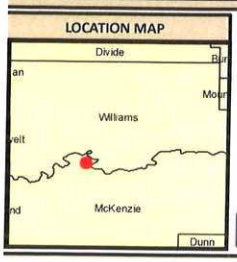
CARSON SWD 5301 43-21 12-24
153N - 101W, Section 24
McKenzie County, ND

Proposed SWD Well
Well Buffers

OASIS PETROLEUM

Exhibit B - Area of Review Plat

LOCATION MAP



CARSON SWD 5301 43-21 12-24

153N - 101W, Section 24

McKenzie County, ND

Proposed SWD Well

Well Buffers

OASIS PETROLEUM

Connors, Kevin C.

From: Michael Kukuk <mkukuk@oasispetroleum.com>
Sent: Tuesday, December 16, 2014 12:52 PM
To: Connors, Kevin C.
Subject: FW: carson
Attachments: ESB_AerialOverview_CarsonSWD5301.pdf; ATT00001.txt

Hi Kevin –

Please see the attached aerial overview. Please let me know if you have any questions/concerns.

Thanks,
Michael

From: Victoria Siemieniewski
Sent: Tuesday, December 16, 2014 12:06 PM
To: Michael Kukuk
Subject: FW: carson

Hello Michael,

Please see attached Aerial overview and below GIS snapshot. The nearest homes are over 1200 ft away from the well head.

Sincerely,

Victoria

From: Eric Branton
Sent: Tuesday, December 16, 2014 11:20 AM
To: Victoria Siemieniewski
Subject: carson

Eric Branton
GIS Lead
Oasis Petroleum
1001 Fannin, Suite 1500
Houston, Texas 77002
281-404-9448
ebranton@oasispetroleum.com

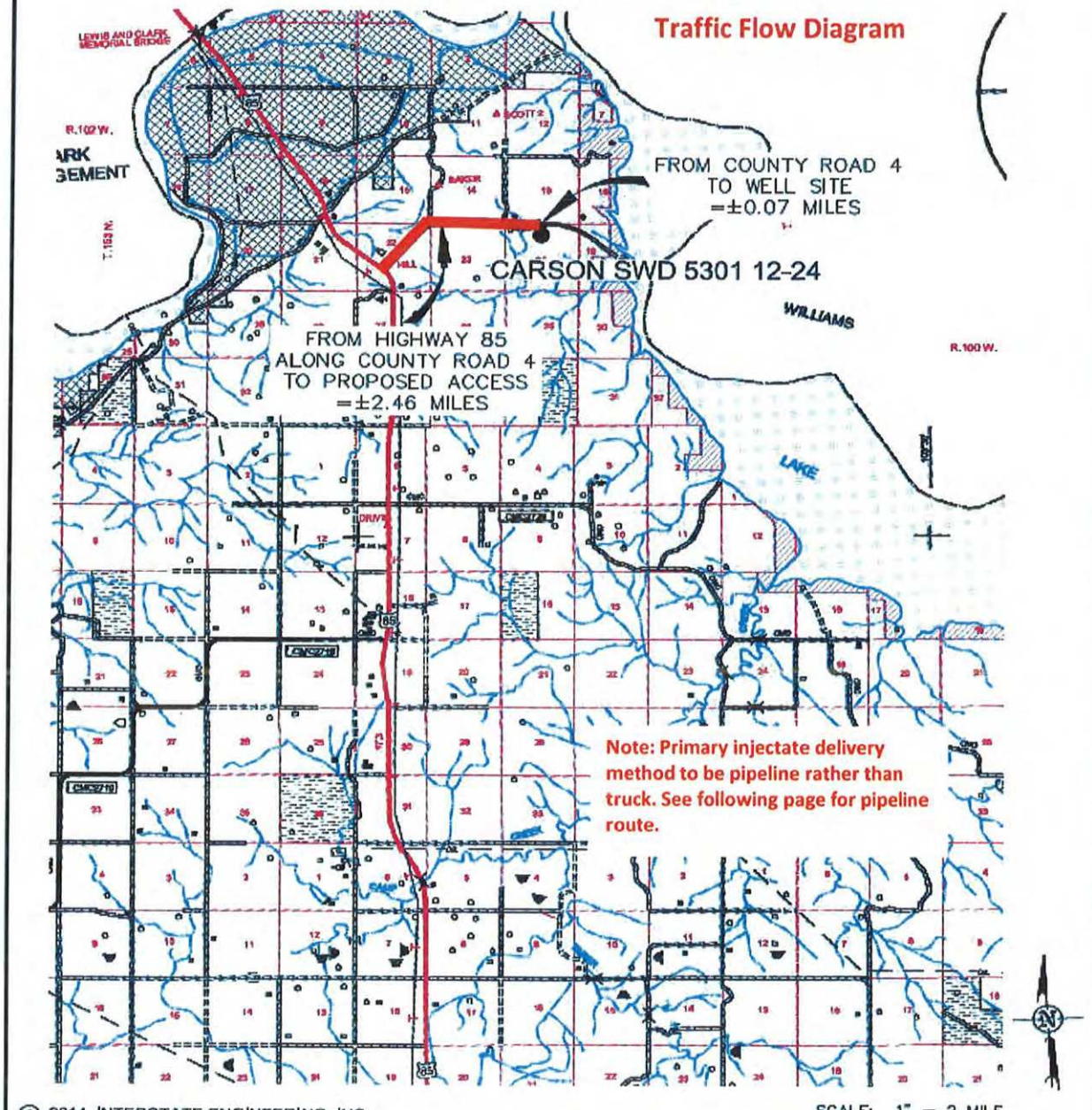
Here's approximate distances to all the structures…you just want the one to the northwest or the northeast too?

Table of Contents – *Carson SWD 5301 12-24*

Application for Permit to Drill – Form 1 1
Application For Injection – Form 14 2
Well Location Plat 4
Proposed Procedure Sundry 5
Wellbore Schematic 6
Lithologic Description 7
Drilling Plan 9
Estimated Geological Tops 9
Preliminary Mud Report 9
Completion Information 9
Frac Fluid Statement 9
Directional Plot and Plans 10
Well Summary 11
Casing and Cementing Report 15
Street Address Request 17
Horizontal Section Plats 18
Pad Layout Plat 19
Pad Layout Dirt Quantities 21
Facility Plat 23
Proposed Injection Program 25
Traffic Flow Diagram 26
Topographic Maps 28
Area of Review 32
Regional Map 33
Corrective Action Assessment 34
Landowner Description 35
Landowner Notification Certification 37
Water Analysis 41
Fresh Water Analysis 41
Injection Fluid Analysis 43
Source Well List 44

COUNTY ROAD MAP

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

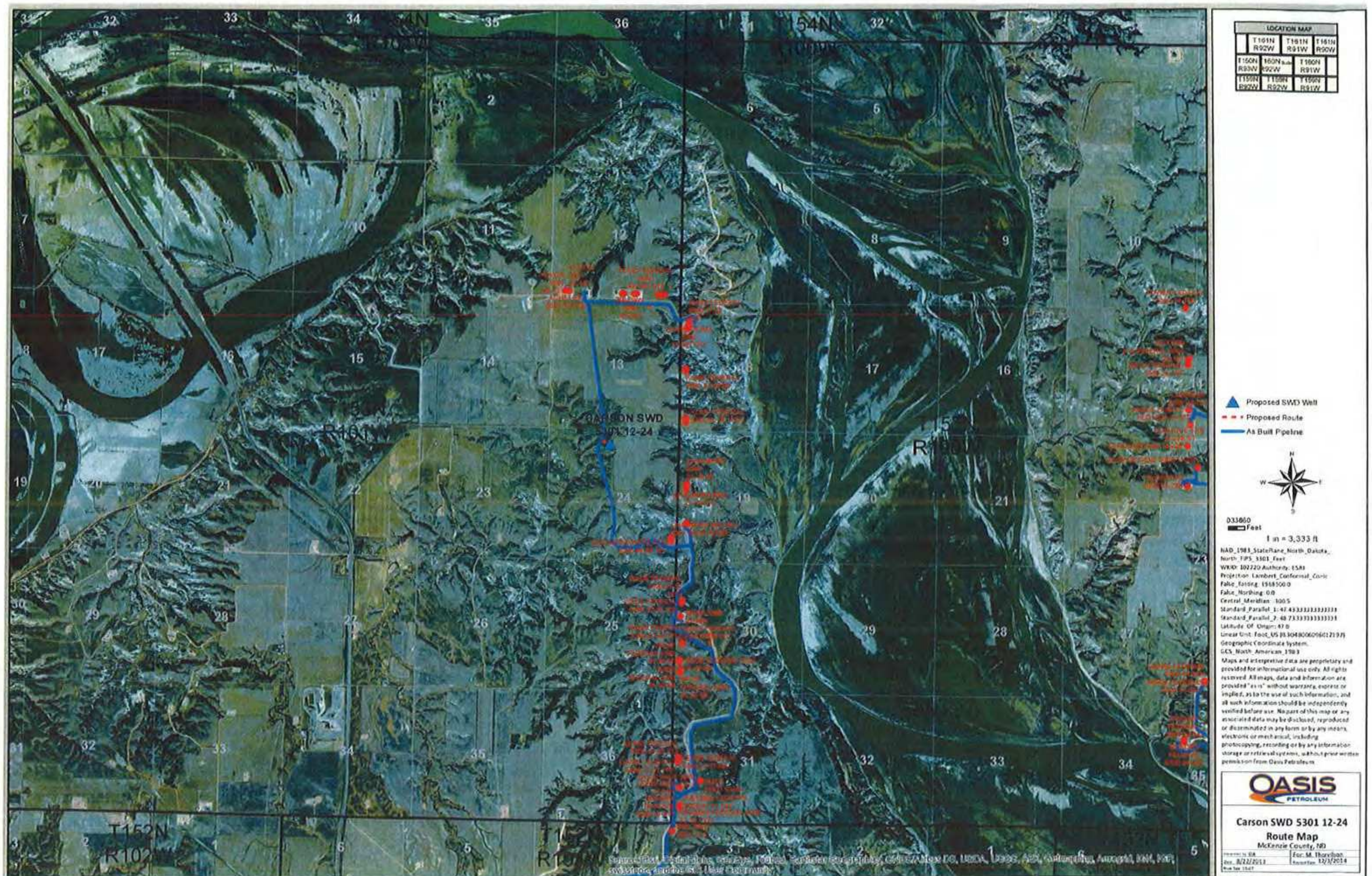


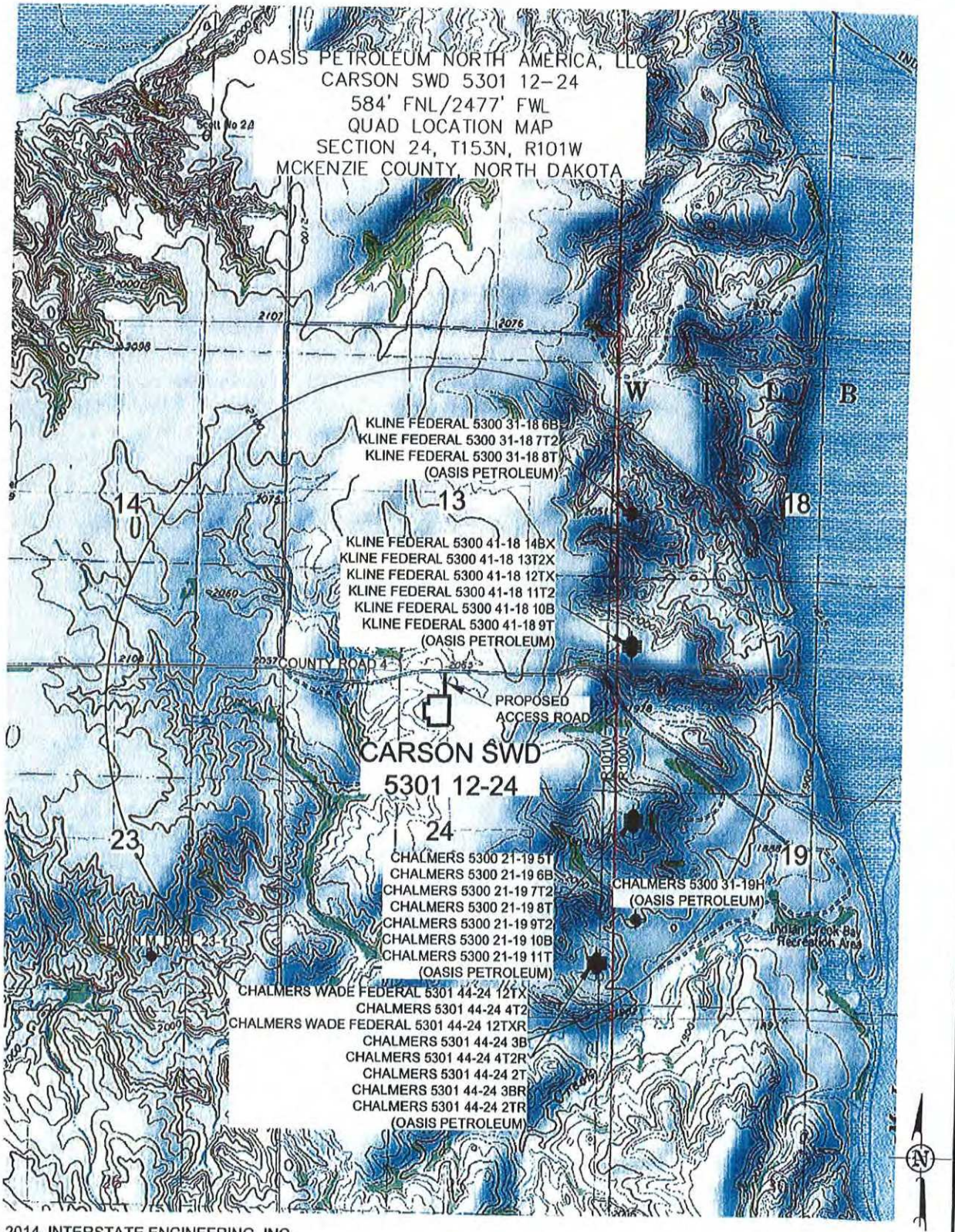
SCALE: 1" = 2 MILE

INTERSTATE ENGINEERING

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

OASIS PETROLEUM NORTH AMERICA, LLC
COUNTY ROAD MAP
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA


Proposed SWD Well
Proposed Route
As Built Pipeline
1 in = 3,333 ft
NAD_1983_StatePlane_North_Dakota_North_FIPS_3301_Feet
Projection: Lambert_Conformal_Conic
False_Northing: 0.0
Latitude Of Origin: 47.0
Geographic Coordinate System:
GCS_North_American_1983
Maps and interpretive data are proprietary and provided for informational use only. All rights reserved. All maps, data and information are provided "as is" without warranty, express or implied, as to the use of such information, and all such information should be independently verified before use. No part of this map or any associated data may be disclosed, reproduced or disseminated in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage or retrieval systems, without prior written permission from Oasis Petroleum
OASIS PETROLEUM
Carson SWD 5301 12-24
Route Map
McKenzie County, ND
For: M. Thorvilson
12/3/2014
CARSON SWD
5301 12-24
T154N
T152N



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

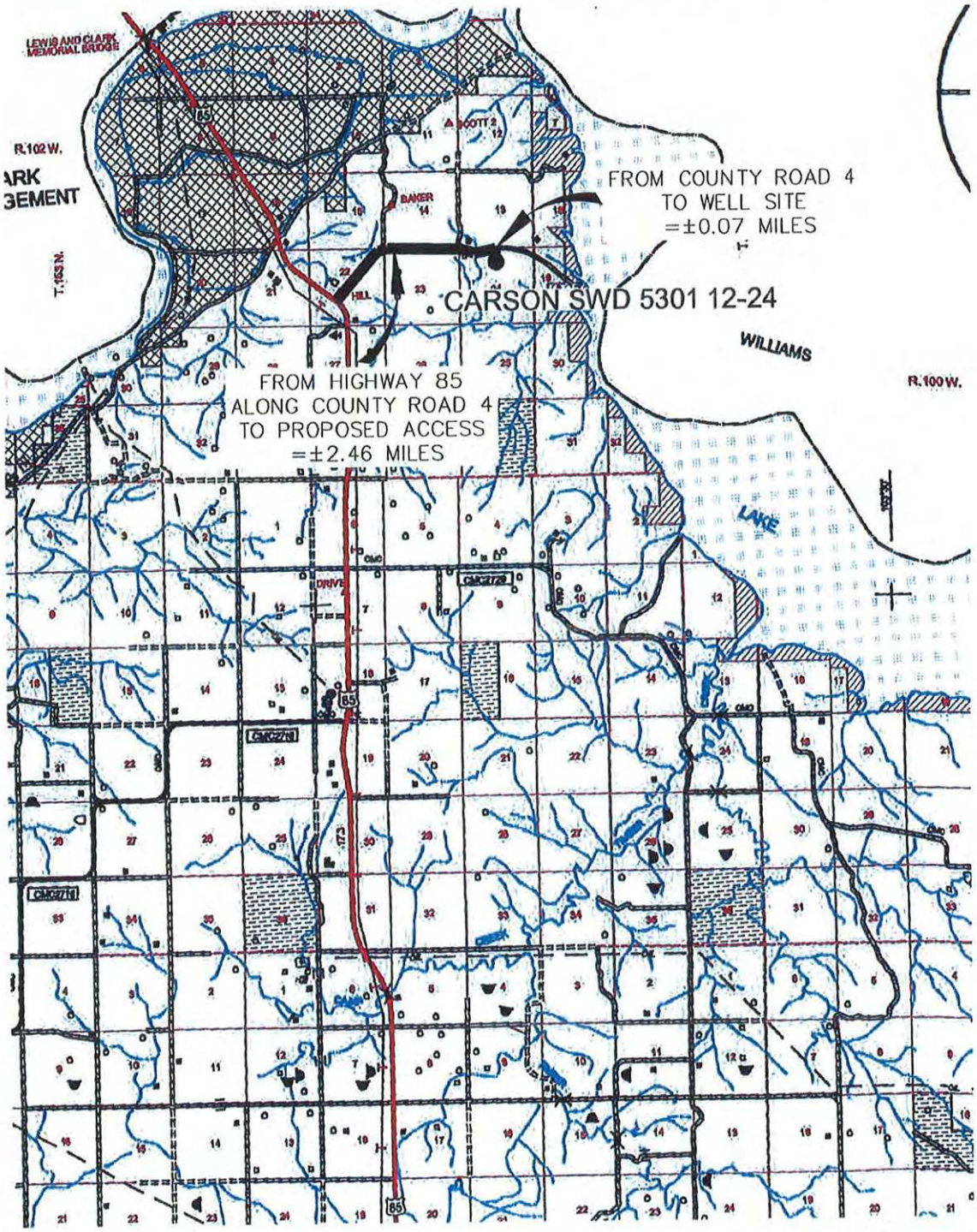
OASIS PETROLEUM NORTH AMERICA, LLC
QUAD LOCATION MAP
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. | Project No.: 514-09-254
Checked By: D.D.K. | Date: NOV. 2014

Revision No.	Date	By	Description

COUNTY ROAD MAP

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



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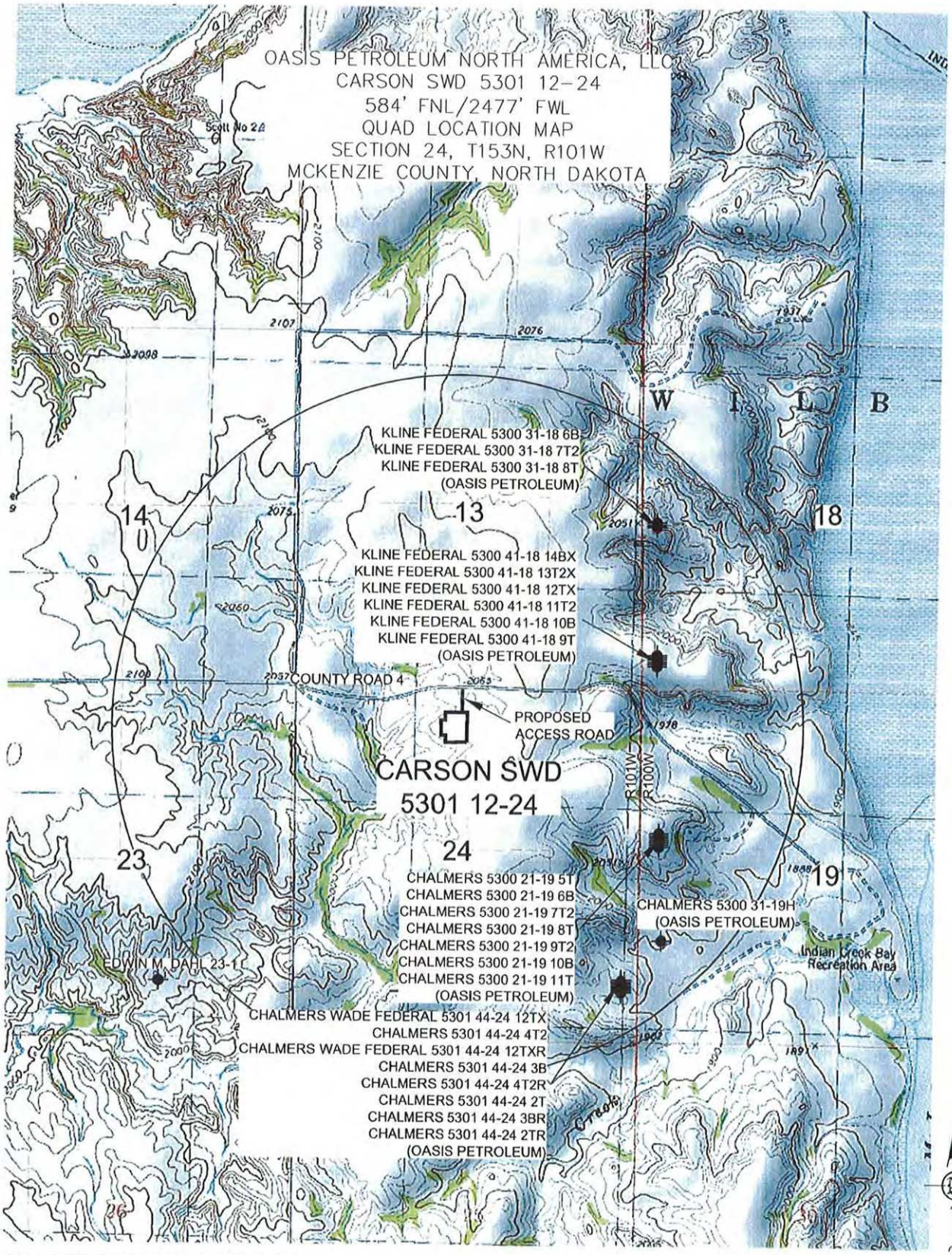
Drawn By: B.H.H. | Project No.: S14-09-254
Checked By: D.D.K. | Date: NOV. 2014

Revision No.	Date	By	Description



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Revision No.	Date	By	Description

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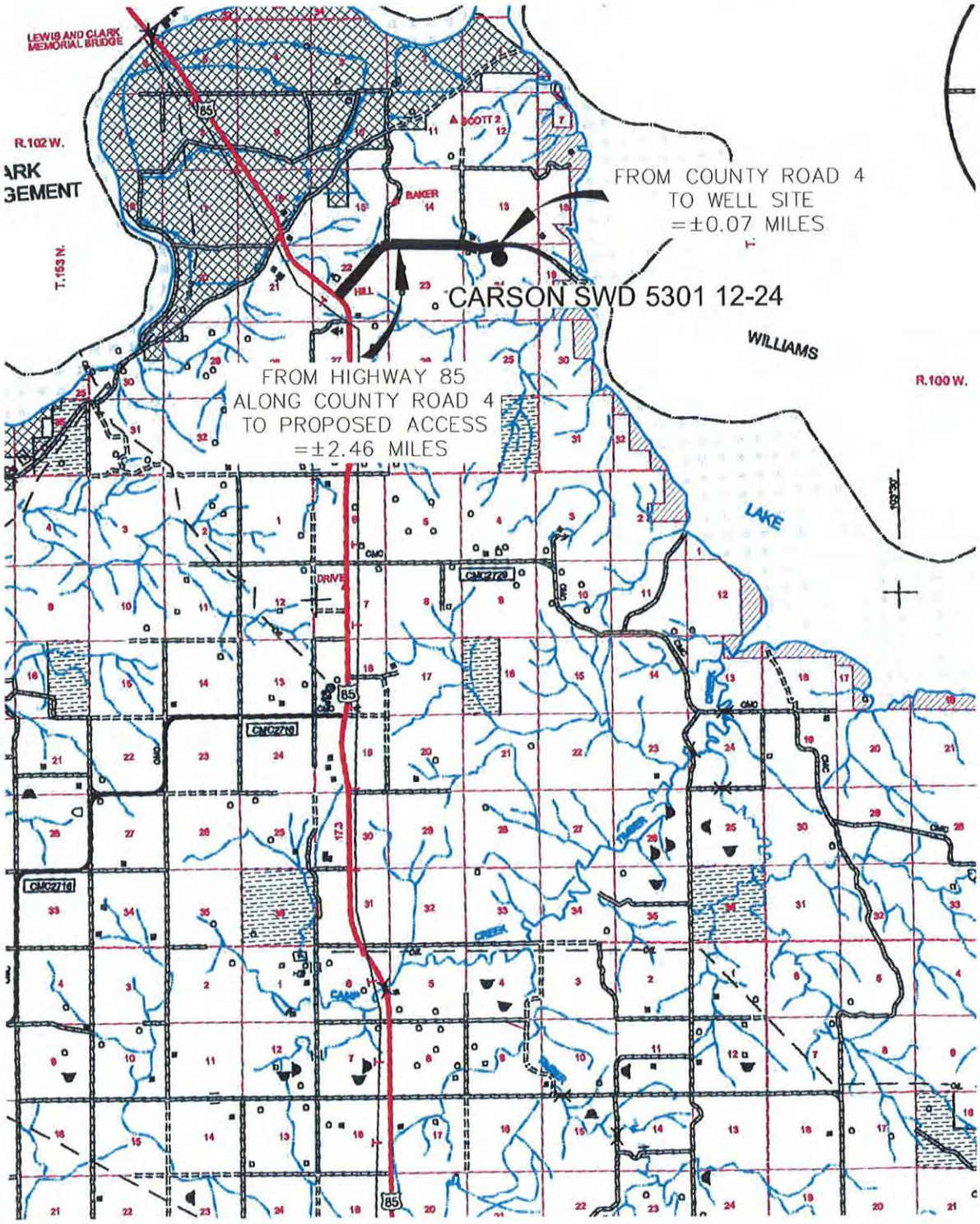

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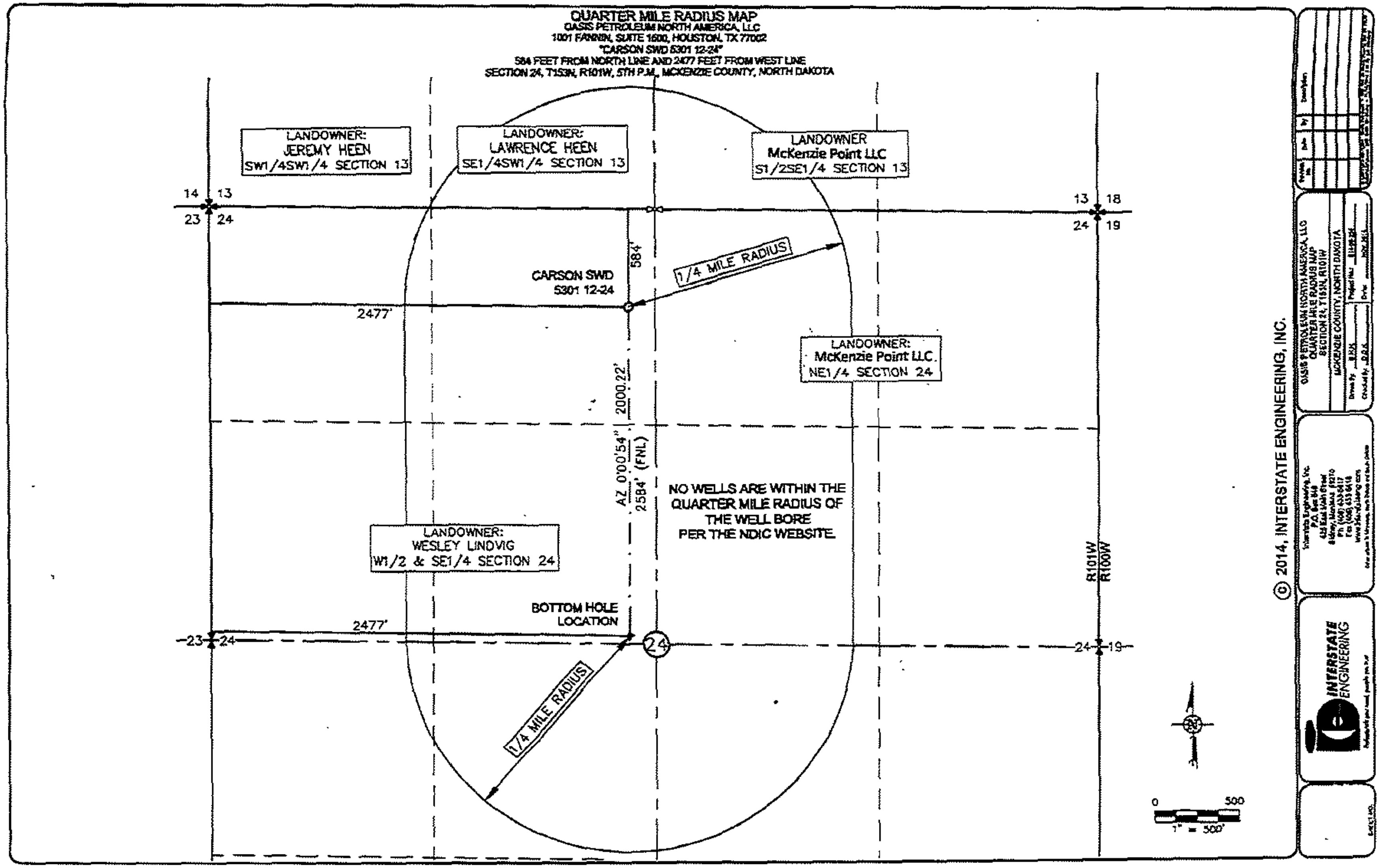
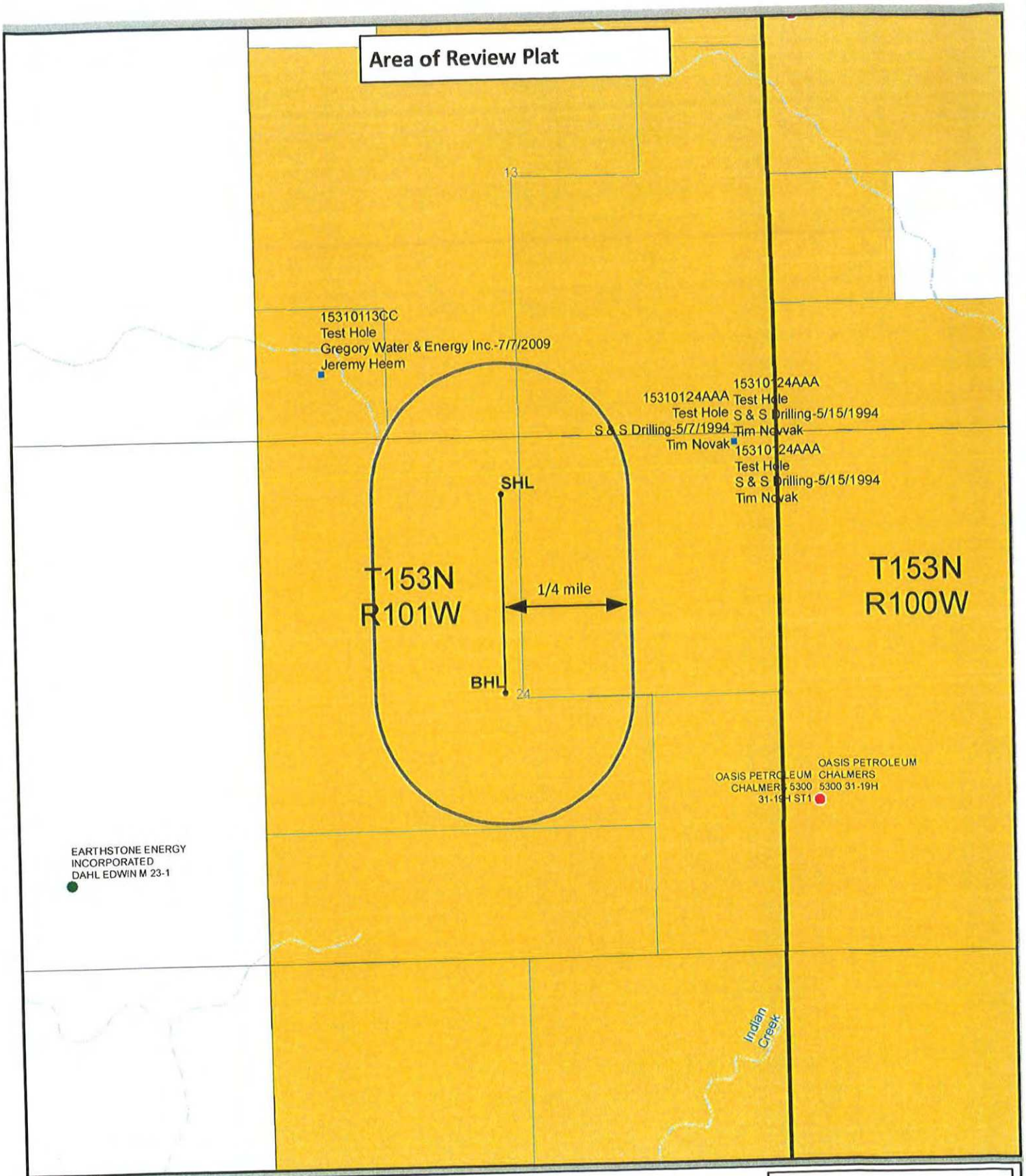
MCKENZIE COUNTY, NORTH DAKOTA

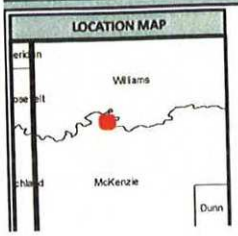
Drawn By:	B.H.H.	Project No.:	S14-09-254
Checked By:	D.D.K.	Date:	NOV. 2014

Revision No.	Date	By	Description


QUARTER MILE RADIUS MAP
OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA
LANDOWNER:
JEREMY HEEN
SW1/4SW1/4 SECTION 13
LANDOWNER:
LAWRENCE HEEN
SE1/4SW1/4 SECTION 13
LANDOWNER
McKenzie Point LLC
S1/2SE1/4 SECTION 13
14
13
23
24
13
18
24
19
584'
1/4 MILE RADIUS
CARSON SWD
5301 12-24
2477'
LANDOWNER:
McKenzie Point LLC
NE1/4 SECTION 24
2000.22'
AZ 0°00'54"
2584' (FNL)
NO WELLS ARE WITHIN THE
QUARTER MILE RADIUS OF
THE WELL BORE
PER THE NDIC WEBSITE
LANDOWNER:
WESLEY LINDVIG
W1/2 & SE1/4 SECTION 24
R101W
R100W
BOTTOM HOLE
LOCATION
2477'
23
24
24
24
19
1/4 MILE RADIUS
0
500
1" = 500'
© 2014, INTERSTATE ENGINEERING, INC.
INTERSTATE ENGINEERING

32





CARSON SWD 5301 12-24

153N - 101W, Section 24

McKenzie County, North Dakota

OASIS PETROLEUM

Carson SWD 5301 12-24
Oasis Petroleum North America, LLC
Section 24, T153N R101W
McKenzie County, North Dakota

Application for Fluid Injection

CORRECTIVE ACTIONS

A search of the NDIC ArcIMS system yielded no wells within a ¼ mile area of the proposed Carson SWD 5301 12-24. No corrective action is required.

AFFIDAVIT OF MAILING

STATE OF NORTH DAKOTA §
§
COUNTY OF MCKENZIE §

The undersigned, Patrick McCauley, of lawful age, first duly sworn on his oath states that he is a duly authorized agent of Oasis Petroleum North America LLC, do hereby certify that I have sent (via certified mail) a Notice of Application for Fluid Injection to each surface owner within a radius of ¼ mile from the location of the proposed injection well (Carson SWD 5301 12-24), T153N-R101W, Section 24: NW4, N2SW4, McKenzie County, ND.

The following contains the names and addresses of all landowners and legal description of the land ownership:

Surface Owners	Legal Description
Lawrence P. Heen 4412 Highway 85 North Williston, ND 58801	Township 153 North, Range 101 West Section 13: SE4SW4
Jeremy A. Heen 4412 Highway 85 North Williston, ND 58801	Township 153 North, Range 101 West Section 13: SW4SW4
McKenzie Point, LLC 5009 139th Ave. NW Williston, ND 58801	Township 153 North, Range 101 West Section 13: E2SE4, SW4SE4 Section 24: NE4
Wesley Lindvig and Barbara Lindvig Tenants in Common 14075 41st Street NW Alexander, ND 58831	Township 153 North, Range 101 West Section 24: NW4, N2SW4, NW4SE4

IN WITNESS WHEREOF, the undersigned has hereunto set his hand this 2nd day of December, 2014.

Oasis Petroleum North America LLC

By: _____
Patrick McCauley, Landman

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF HARRIS §

BE IT REMEMBERED, that on this 2nd day of December, 2014, before me, a Notary Public, in and for said County and State, personally appeared Patrick McCauley, to me known to be the identical person described in and who executed the within and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

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

WHITNEY EVANS
Notary Public, State of Texas
My Commission Expires
October 09, 2017

_____
Notary Public
My Commission Expires: 10·09·2017

IN WITNESS WHEREOF, the undersigned has hereunto set his hand this 7th day of January, 2015.

Oasis Petroleum North America LLC

By: _____
Patrick McCauley, Landman

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF HARRIS §

BE IT REMEMBERED, that on this 7th day of January, 2015, before me, a Notary Public, in and for said County and State, personally appeared Patrick McCauley, to me known to be the identical person described in and who executed the within and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

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

KELSEY LINN JACKSON
Notary Public, State of Texas
My Commission Expires
September 13, 2016

_____
Notary Public
My Commission Expires: 9-13-2016

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Jeremy A. Heen
4502 139th Ave. NW
Alexander, ND 58831

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Linda Heen ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7013 2250 0001 3657 6080

PS Form 3811, July 2013 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Lawrence P. Heen
14033 45th St. NW
Alexander, ND 58831

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7013 2250 0001 3657 6073

PS Form 3811, July 2013 Domestic Return Receipt

AFFIDAVIT OF MAILING

STATE OF NORTH DAKOTA §
§
COUNTY OF MCKENZIE §

The undersigned, Patrick McCauley, of lawful age, first duly sworn on his oath states that he is a duly authorized agent of Oasis Petroleum North America LLC, do hereby certify that I have sent (via certified mail) a Notice of Application for Fluid Injection to each surface owner within a radius of ¼ mile from the location of the proposed injection well (Carson SWD 5301 12-24), T153N-R101W, Section 24: NW4, N2SW4, McKenzie County, ND.

The following contains the names and addresses of all landowners and legal description of the land ownership:

Surface Owners	Legal Description
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Jeremy A. Heen 4502 139th Ave. NW Alexander, ND 58831	Township 153 North, Range 101 West Section 13: SW4SW4
McKenzie Point, LLC 5009 139th Ave. NW Williston, ND 58801	Township 153 North, Range 101 West Section 13: E2SE4, SW4SE4 Section 24: NE4
Wesley Lindvig and Barbara Lindvig Tenants in Common 14075 41st Street NW Alexander, ND 58831	Township 153 North, Range 101 West Section 24: NW4, N2SW4, NW4SE4

OASIS PETROLEUM

January 7, 2015

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Lawrence P. Heen
14033 45th St NW
Alexander, ND 58831

RE: Proposed Saltwater Disposal Well
Carson SWD 5301 12-24
T153N-R101W Section 24: NW4, N2SW4
McKenzie County, North Dakota

Dear Mr. Heen,

This letter is to advise you that Oasis Petroleum North America LLC is planning a saltwater disposal well and inject fluids (saltwater) from source wells in the area into the referenced location.

In accordance with the rules and regulations of the North Dakota Industrial Commission ("NDIC"), Oasis is required to give notice that it has made application to perform this work to each landowner within a one-quarter mile radius of the injection site. At a date yet to be determined, the NDIC will conduct a hearing regarding this application in the Department of Mineral Resources Conference Room located at 1000 East Calgary Avenue, Bismarck, ND 58503. Your comments or objections regarding this application may be directed to the Commission at that time.

Written comments or objections may be submitted prior to the hearing to the following address:

North Dakota Industrial Commission
600 E. Boulevard Avenue, Dept. 405
Bismarck, ND 58505

If you have any questions, concerns, or to determine the hearing date, please contact Kevin Connors, UIC/CCS Supervisor for the NDIC Oil & Gas Division at 701-328-8020.

Sincerely,

Patrick McCauley
Landman
(281) 404-9547
pmccauley@oasispetroleum.com

OASIS PETROLEUM

January 7, 2015

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Jeremy A. Heen
4502 139th Ave. NW
Alexander, ND 58831

RE: Proposed Saltwater Disposal Well
Carson SWD 5301 12-24
T153N-R101W Section 24: NW4, N2SW4
McKenzie County, North Dakota

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If you have any questions, concerns, or to determine the hearing date, please contact Kevin Connors, UIC/CCS Supervisor for the NDIC Oil & Gas Division at 701-328-8020.

Sincerely,

Patrick McCauley
Landman
(281) 404-9547
pmccauley@oasispetroleum.com

December 2nd, 2014

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Lawrence P. Heen
4412 Highway85 North
Williston, ND 58801

RE: Proposed Saltwater Disposal Well
Carson SWD 5301 12-24
T153N-R101W Section 24: NW4, N2SW4
McKenzie County, North Dakota

Dear Mr. Heen,

This letter is to advise you that Oasis Petroleum North America LLC is planning a saltwater disposal well and inject fluids (saltwater) from source wells in the area into the referenced location.

In accordance with the rules and regulations of the North Dakota Industrial Commission ("NDIC"), Oasis is required to give notice that it has made application to perform this work to each landowner within a one-quarter mile radius of the injection site. At a date yet to be determined, the NDIC will conduct a hearing regarding this application in the Department of Mineral Resources Conference Room located at 1000 East Calgary Avenue, Bismarck, ND 58503. Your comments or objections regarding this application may be directed to the Commission at that time.

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Bismarck, ND 58505

If you have any questions, concerns, or to determine the hearing date, please contact Kevin Connors, UIC/CCS Supervisor for the NDIC Oil & Gas Division at 701-328-8020.

Sincerely,

Patrick McCauley
Landman
(281) 404-9547
pmccauley@oasispetroleum.com

December 2nd, 2014

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Jeremy A. Heen
4412 Highway85 North
Williston, ND 58801

RE: Proposed Saltwater Disposal Well
Carson SWD 5301 12-24
T153N-R101W Section 24: NW4, N2SW4
McKenzie County, North Dakota

Dear Mr. Heen,

This letter is to advise you that Oasis Petroleum North America LLC is planning a saltwater disposal well and inject fluids (saltwater) from source wells in the area into the referenced location.

In accordance with the rules and regulations of the North Dakota Industrial Commission ("NDIC"), Oasis is required to give notice that it has made application to perform this work to each landowner within a one-quarter mile radius of the injection site. At a date yet to be determined, the NDIC will conduct a hearing regarding this application in the Department of Mineral Resources Conference Room located at 1000 East Calgary Avenue, Bismarck, ND 58503. Your comments or objections regarding this application may be directed to the Commission at that time.

Written comments or objections may be submitted prior to the hearing to the following address:

North Dakota Industrial Commission
600 E. Boulevard Avenue, Dept. 405
Bismarck, ND 58505

If you have any questions, concerns, or to determine the hearing date, please contact Kevin Connors, UIC/CCS Supervisor for the NDIC Oil & Gas Division at 701-328-8020.

Sincerely,

Patrick McCauley
Landman
(281) 404-9547
pmccauley@oasispetroleum.com

December 2nd, 2014

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

McKenzie Point, LLC
5009 139th Ave. NW
Williston, ND 58801

RE: Proposed Saltwater Disposal Well
Carson SWD 5301 12-24
T153N-R101W Section 24: NW4, N2SW4
McKenzie County, North Dakota

Dear McKenzie Point, LLC,

This letter is to advise you that Oasis Petroleum North America LLC is planning a saltwater disposal well and inject fluids (saltwater) from source wells in the area into the referenced location.

In accordance with the rules and regulations of the North Dakota Industrial Commission ("NDIC"), Oasis is required to give notice that it has made application to perform this work to each landowner within a one-quarter mile radius of the injection site. At a date yet to be determined, the NDIC will conduct a hearing regarding this application in the Department of Mineral Resources Conference Room located at 1000 East Calgary Avenue, Bismarck, ND 58503. Your comments or objections regarding this application may be directed to the Commission at that time.

Written comments or objections may be submitted prior to the hearing to the following address:

North Dakota Industrial Commission
600 E. Boulevard Avenue, Dept. 405
Bismarck, ND 58505

If you have any questions, concerns, or to determine the hearing date, please contact Kevin Connors, UIC/CCS Supervisor for the NDIC Oil & Gas Division at 701-328-8020.

Sincerely,

Patrick McCauley
Landman
(281) 404-9547
pmccauley@oasispetroleum.com

December 2nd, 2014

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Wesley Lindvig and Barbara Lindvig
Tenants in Common
14075 41st Street NW
Alexander, ND 58831

RE: Proposed Saltwater Disposal Well
Carson SWD 5301 12-24
T153N-R101W Section 24: NW4, N2SW4
McKenzie County, North Dakota

Dear Mr. and Mrs. Lindvig,

This letter is to advise you that Oasis Petroleum North America LLC is planning a saltwater disposal well and inject fluids (saltwater) from source wells in the area into the referenced location.

In accordance with the rules and regulations of the North Dakota Industrial Commission ("NDIC"), Oasis is required to give notice that it has made application to perform this work to each landowner within a one-quarter mile radius of the injection site. At a date yet to be determined, the NDIC will conduct a hearing regarding this application in the Department of Mineral Resources Conference Room located at 1000 East Calgary Avenue, Bismarck, ND 58503. Your comments or objections regarding this application may be directed to the Commission at that time.

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North Dakota Industrial Commission
600 E. Boulevard Avenue, Dept. 405
Bismarck, ND 58505

If you have any questions, concerns, or to determine the hearing date, please contact Kevin Connors, UIC/CCS Supervisor for the NDIC Oil & Gas Division at 701-328-8020.

Sincerely,

Patrick McCauley
Landman
(281) 404-9547
pmccauley@oasispetroleum.com

AFFIDAVIT

STATE OF NORTH DAKOTA §
§
COUNTY OF MCKENZIE §

The undersigned, Thomas Osen, of lawful age, first duly sworn on his oath states that he is a duly authorized agent of Oasis Petroleum North America LLC, do hereby certify that I have attempted to obtain water samples from the two nearest freshwater wells within a one-mile radius of the proposed location of the Carson SWD 5301 12-24, located in T153N-R101W, Section 24: NW4, N2SW4 in McKenzie County, ND.

I have obtained a water sample from a house spigot at a nearby residence that has been analyzed and will be submitted with the permit. I have diligently attempted to locate water wells within the area of review and have not been able to locate one. The one we have located does not have electricity and we are still attempting to acquire a sample from it.

IN WITNESS WHEREOF, the undersigned has hereunto set his hand this 3rd day of December, 2014.

Oasis Petroleum North America LLC

By: Thomas Osen
Thomas Osen

ACKNOWLEDGMENT

STATE OF North Dakota §
§
COUNTY OF Williams §

BE IT REMEMBERED, that on this 3rd day of December, 2014, before me, a Notary Public, in and for said County and State, personally appeared **Thomas Osen**, to me known to be the identical person described in and who executed the within and foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

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

Kristy Aasheim
Notary Public
My Commission Expires: 1/17/17

Kristy Aasheim Notarial SEAL State of Montana

Kristy Aasheim
NOTARY PUBLIC for the
State of Montana
Residing at Plentywood, Montana
My Commission Expires
January 17, 2017

ASTRO-CHEM LAB, INC.

4102 2nd Ave. West
Williston, North Dakota 58802-0972
P.O Box 972
Phone: (701) 572-7355

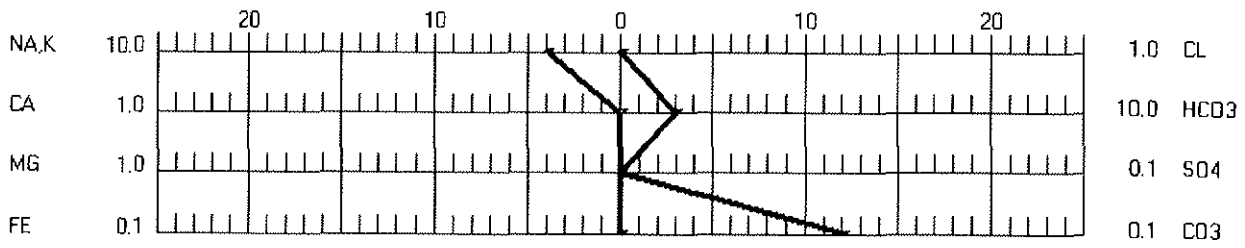
WATER ANALYSIS REPORT

Sample Number: W-14-9192 Date of Analysis: 11/05/2014
Company: Oasis Petroleum
City: Williston State: ND
Well Number: Lindvig S.W.D.
Date Received: 10/30/2014 DST Number:
Sample Source: Brandon Turcotte Residence (House Spigot)
Location: SWSE Section: 22 Township: 153 Range: 101 County:
Formation: Depth:
Distribution: Thomas Osen

Resistivity @ 77 °F	3.540 Ohm-Meters		pH	8.35
Specific Gravity @ 77 °F	1.000		H2S	Negative
Total Dissolved Solids (Calculated)	2914	mg/L	(2914	ppm)
Sodium Chloride (Calculated)	11	mg/L	(11	ppm)

CATION	MEQ/L	mg/L	ANION	MEQ/L	mg/L
CALCIUM	0.2	4	CHLORIDE	0.2	7
MAGNESIUM	0.2	2	CARBONATE	1.2	36
SODIUM	37.4	860	BICARBONATE	32.8	2001
IRON	0.0	0.0	SULFATE	0.0	0
CHROMIUM	0.0	0.0	NITRATE-N	0.0	0
BARIUM	0.0	0.0			
POTASSIUM	0.1	4			

WATER ANALYSIS PATTERN



Remarks: Conductivity = 2822 µmhos/cm / Sampled 10-28-14
Lat 48-03-12.4 / Long 103-29-25.18

Analyzed By: C. Jungels

ASTRO-CHEM LAB, INC.

4102 2nd Ave. West
Williston, North Dakota 58802-0972
P.O. Box 972
Phone: (701) 572-7355

WATER ANALYSIS REPORT

SAMPLE NUMBER W-12-2853 DATE OF ANALYSIS 4-25-12

COMPANY Oasis Petroleum

CITY Williston STATE ND

WELL NAME AND/OR NUMBER Chalmers 5300-31-19H

DATE RECEIVED 4-11-12 DST NUMBER

SAMPLE SOURCE

LOCATION Lot3 OF SEC. 19 TWN. 153N RANGE 100W COUNTY McKenzie

FORMATION DEPTH

DISTRIBUTION Distribution List

RESISTIVITY @ 77°F = 0.038 Ohm-Meters pH = 5.47

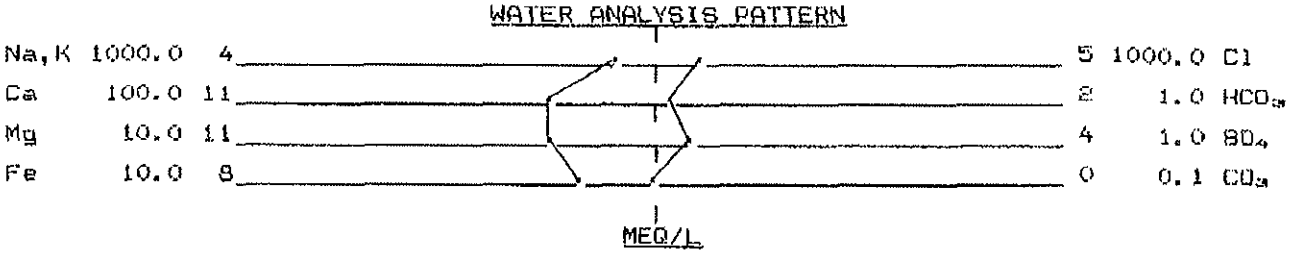
SPECIFIC GRAVITY @ 77°F = 1.215 H_2S = Negative

TOTAL DISSOLVED SOLIDS (CALCULATED) = 313035 mg/L (257642 ppm)

SODIUM CHLORIDE (CALCULATED) = 309798 mg/L (254978 ppm)

CATION	MEQ/L	mg/L	ANION	MEQ/L	mg/L
CALCIUM	1070.0	21229	CHLORIDE	5299.2	187873
MAGNESIUM	110.0	1222	CARBONATE	0.0	0
SODIUM	4045.3	93000	BICARBONATE	2.4	146
IRON	81.7	1520.0	SULFATE	3.8	182
CHROMIUM	0.1	1.0	NITRATE	0.0	0
BARIUM	0.6	41.7			
POTASSIUM	200.0	7820			

WATER ANALYSIS PATTERN



REMARKS Sampled 4-11-12

ANALYZED BY: C. Jungels

Oasis Petroleum North America LLC
Application for Salt Water Disposal
Sec 24-153N-101W, McKenzie County, ND
Carson SWD 5301 12-24

Preliminary List of Source Wells*

Well Name:	Chalmers 5300 31-19H
Operator:	Oasis Petroleum North America LLC
Location:	NWSW 19-153-100
API Number:	3305303472
NDIC Well File:	20407

Well Name:	Chalmers 5300 21-19 10B
Operator:	Oasis Petroleum North America LLC
Location:	SWNW 19-153-100
API Number:	3305306022
NDIC Well File:	28637

Well Name:	Kline Federal 5300 11-18 4T2
Operator:	Oasis Petroleum North America LLC
Location:	NWNW 18-153-100
API Number:	3305306224
NDIC Well File:	29243

Well Name:	Kline Federal 5300 11-18 5B
Operator:	Oasis Petroleum North America LLC
Location:	NWNW 18-153-100
API Number:	3305306223
NDIC Well File:	29242

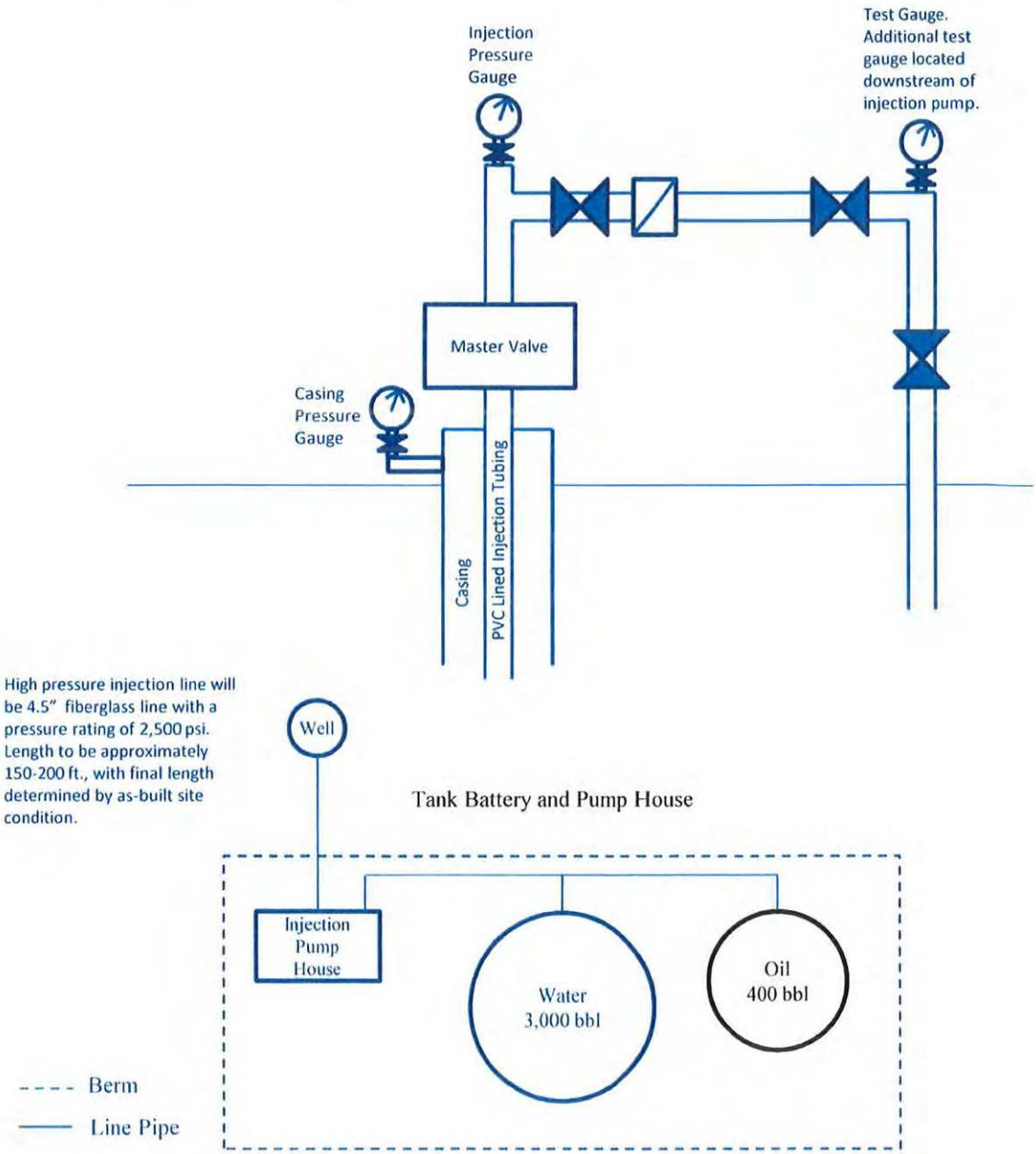
Well Name:	Kline Federal 5300 11-18 6B
Operator:	Oasis Petroleum North America LLC
Location:	NWSW 18-153-100
API Number:	3305306057
NDIC Well File:	28756

**Subject to addition of operated and non-operated source wells.*

Surface Facilities Diagram

Surface Facilities Schematics

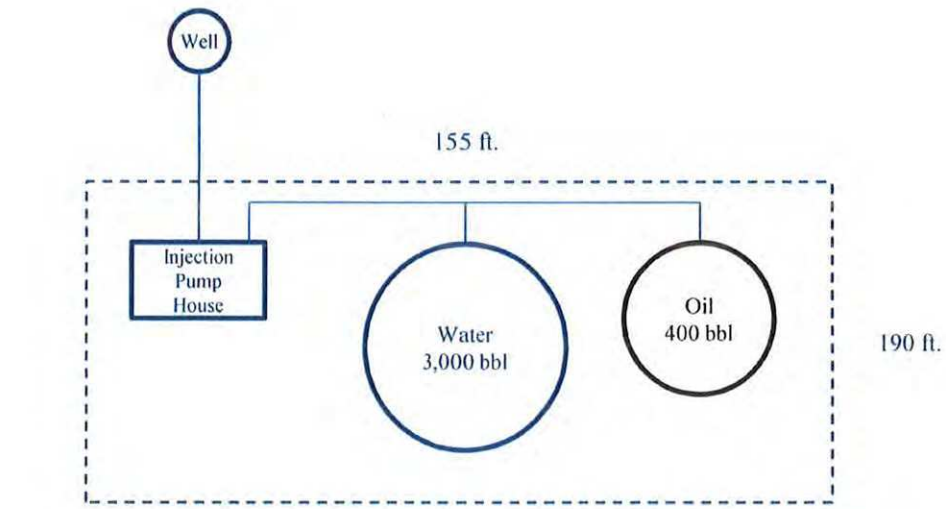
Carson SWD 5301 12-24
Oasis Petroleum
Section 24, T153N R101W
McKenzie County, North Dakota



Surface Facilities Diagram

SWD Dike Schematics

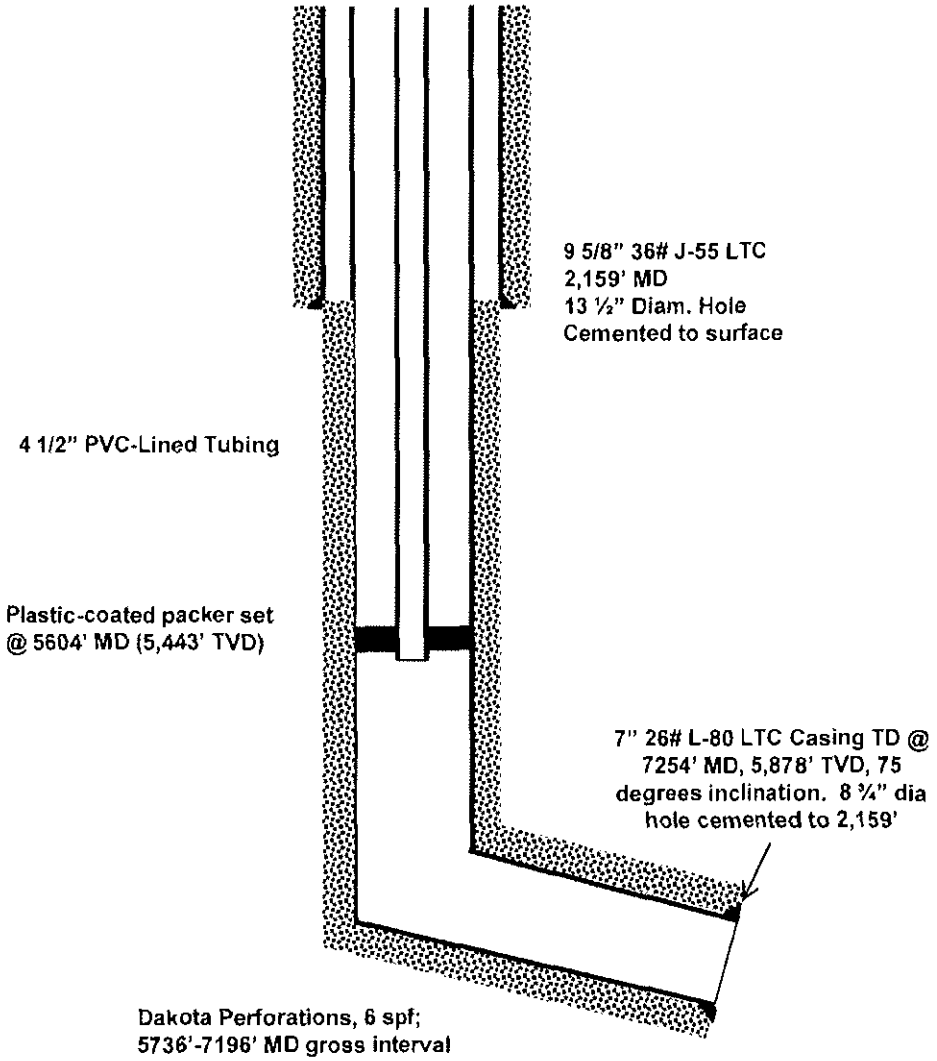
Carson SWD 5301 12-24
Oasis Petroleum
Section 24, T153N R101W
McKenzie County, North Dakota



Dike Containment = 19,231 bbls
Pump House & Tanks Volume = 402 bbls
Effective Dike Containment = 18,829 bbls

CARSON SWD 5301 12-24
WELLBORE SCHEMATIC

API #:
FORMATION: Dakota
FIELD: Camp



OASIS PETROLEUM INC.

CARSON SWD 5301 12-24	Status: Planned
T153N-R101W Sec. 24	McKenzie County, North Dakota
584' FNL & 2477' FWL	Updated: 11/25/2014

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. 90329

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

☑ Notice of Intent	Approximate Start Date: February 1, 2015	☐ Drilling Prognosis	☐ Spill Report
☐ Report of Work Done	Date Work Completed:	☐ Redrilling or Repair	☐ Shooting
☐ 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:	☐ Casing or Liner	☐ Acidizing
		☐ Plug Well	☐ Fracture Treatment
		☐ Supplemental History	☐ Change Production Method
		☐ Temporarily Abandon	☐ Reclamation
		☑ Other **Proposed Procedure**	

Well Name and Number					
Carson SWD 5301 12-14 24					
Footages		Qtr-Qtr	Section	Township	Range
584 F **N** L	**2477** F **W** L	**NENW**	**24**	**153 N**	**101 W**
Field	Pool	County			
Baker	**Dakota**	**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

Drill Procedure:
1. Notify state inspector prior to spud
2. Drill 13 1/2" hole to 2159'
3. TOOH and run 9 5/8" casing
3. Drill 8.75" hole to 4797'
4. Kickoff due South with BR's of 8deg/100'
4. Hold @ 75.15 deg inc to TD
6. TOOH and run 7" casing to bottom
Completion Procedure:
1. Rig up pump truck and test wellbore to 1,500 psi.
2. MIRU wireline and mast truck.
3. RIH with perf assembly and perforate Dakota at 6 spf.
4. RU pump truck and perform injectivity test. If necessary, acidize perforations and add additional perfs.
5. PU plastic lined packer and new 4.5" plastic coated tubing. TIH and set packer 50' above top perforation.
6. Pressure test backside to 1,000 psi and record – MIT must be witnessed by a NDIC field inspector.
7. RD workover rig and install SWD facilities

* Notify field inspector prior to beginning well site construction (KCC)

Company		Telephone Number
Oasis Petroleum North America LLC		**281-404-9652**
Address		
1001 Fannin Suite 1500		
City	State	Zip Code
Houston	**TX**	**77002**
Signature	Printed Name	
	Victoria Siemieniewski	
Title	Date	
Regulatory Specialist	**December 8, 2014**	
Email Address		
vsiemieniewski@oasispetroleum.com		

FOR STATE USE ONLY

☐ Received	☑ Approved
Date: 3/20/2015	
By: Kevin Connors	
Title: KEVIN CONNORS UNDERGROUND INJECTION SUPERVISOR	

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

March 20, 2015

Victoria Siemieniewski
Regulatory Specialist
OASIS PETROLEUM NORTH AMERICA LLC
1001 Fannin, Suite 1500
Houston, TX 77002

RE: DIRECTIONAL WELL
CARSON SWD 5301 12-24
NENW Section 24-153N-101W
McKenzie County
Well File # 90329

Dear Victoria:

Pursuant to Commission Order No. 25893, approval to drill the above captioned well is hereby given.

PERMIT STIPULATIONS: OASIS PETROLEUM NORTH AMERICA must contact NDIC Field Inspector Richard Dunn at (701) 770-3554 prior to location construction.

Effective June 1, 2014, all operators of disposal wells in North Dakota are required to maintain an on-site container to store filters until they can be properly disposed of in an authorized facility. Such containers must be:

- **Leak-proof to prevent any fluids from escaping**
- **Covered to prevent precipitation from entering the container**
- **Labeled to indicate only filters are to be placed in the container**

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

Any changes, shortening of casing point or lengthening at Total Depth must have prior approval by the NDIC.

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.

Conductors, Rat holes, and Mouse holes

To protect near surface groundwater any conductor, rat, or mouse hole drilled must be constructed with a string of casing and cemented to ground level. Any such string must be secured at the surface when not in use. In addition, all rat and mouse holes must be plugged with cement and cut off at least 4' below final grade within a reasonable timeframe after the rig completes drilling operations on the pad.

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,

Kevin Connors
UIC\CCS Supervisor

APPLICATION FOR PERMIT TO DRILL - FORM 1

INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
600 EAST BOULEVARD DEPT 405
BISMARCK, ND 58505-0840
SFN 4615 (03-2006)

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

Type of Work	Type of Well	Approximate Date Work Will Start	Confidential Status
New Location	Salt Water Disposal	1 / 1 / 2015	No

Operator	Telephone Number
OASIS PETROLEUM NORTH AMERICA LLC	(281) 404-9500

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

Name of Surface Owner or Tenant			
Wesley and Barbara Lindvig			
Address	**City**	**State**	**Zip Code**
1407 41st ST NW	Alexander	ND	58831

WELL INFORMATION

☑ 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 Name	Well Number
CARSON SWD	5301 12-24

	Qtr-Qtr	Section	Township	Range	County
At Surface: 584 F N L 2477 F W L	NENW	24	153 N	101 W	McKenzie
If Directional, Top of Pay: 1117 F N L 2477 F W L	NENW	24	153 N	101 W	McKenzie
Proposed Bottom Hole Location: 2584 F N L 2477 F W L	SWSE	24	153 N	101 W	McKenzie

Latitude of Well Head	Longitude of Well Head	NAD Reference	Description of (Subject to NDIC Approval)
48 ° 03 ' 57.89 "	-103 ° 36 ' 56.05 "	NAD83	Spacing Unit: Section 24 T153N R101W

Ground Elevation	Acres in Spacing/Drilling Unit	Spacing/Drilling Unit Setback Requirement	Industrial Commission Order
2087 Feet Above S.L.		Feet	25893

Objective Horizons	Pierre Shale Top
Dakota	2059

	Size	Weight	Depth	Cement Volume	
Proposed Surface Casing	9 - 5/8 "	36 Lb./Ft.	2159 Feet	635 Sacks	NOTE: Surface hole must be drilled with fresh water and surface casing must be cemented back to surface.

	Size	Weight(s)	Longstring Total Depth		Cement Volume	Cement Top	Top Dakota Sand
Proposed Longstring Casing	7 - "	26 Lb./Ft.	7254 Feet MD	5878 Feet TVD	509 Sacks	2159 Feet	5421 Feet

Base Last Charles Salt (If Applicable)	Estimated Total Depth (feet)		Drilling Mud Type (Vertical Hole - Below Surface Casing)
Feet	7254 Feet MD	5878 Feet TVD	Invert

Proposed Logs: triple combo through mowry, GR/RES to BSC, GR to surf

Comments

I hereby swear or affirm that the information provided is true, complete and correct as determined from all available records. Date: 12 / 10 / 2014

ePermit	Printed Name	Title
	Victoria Siemieniewski	Regulatory Specialist

FOR STATE USE ONLY

Permit and File Number	API Number
90329	33 - 053 - 90329
Field: BAKER	
Pool: DAKOTA	Permit Type: SALT WATER DISPOSAL

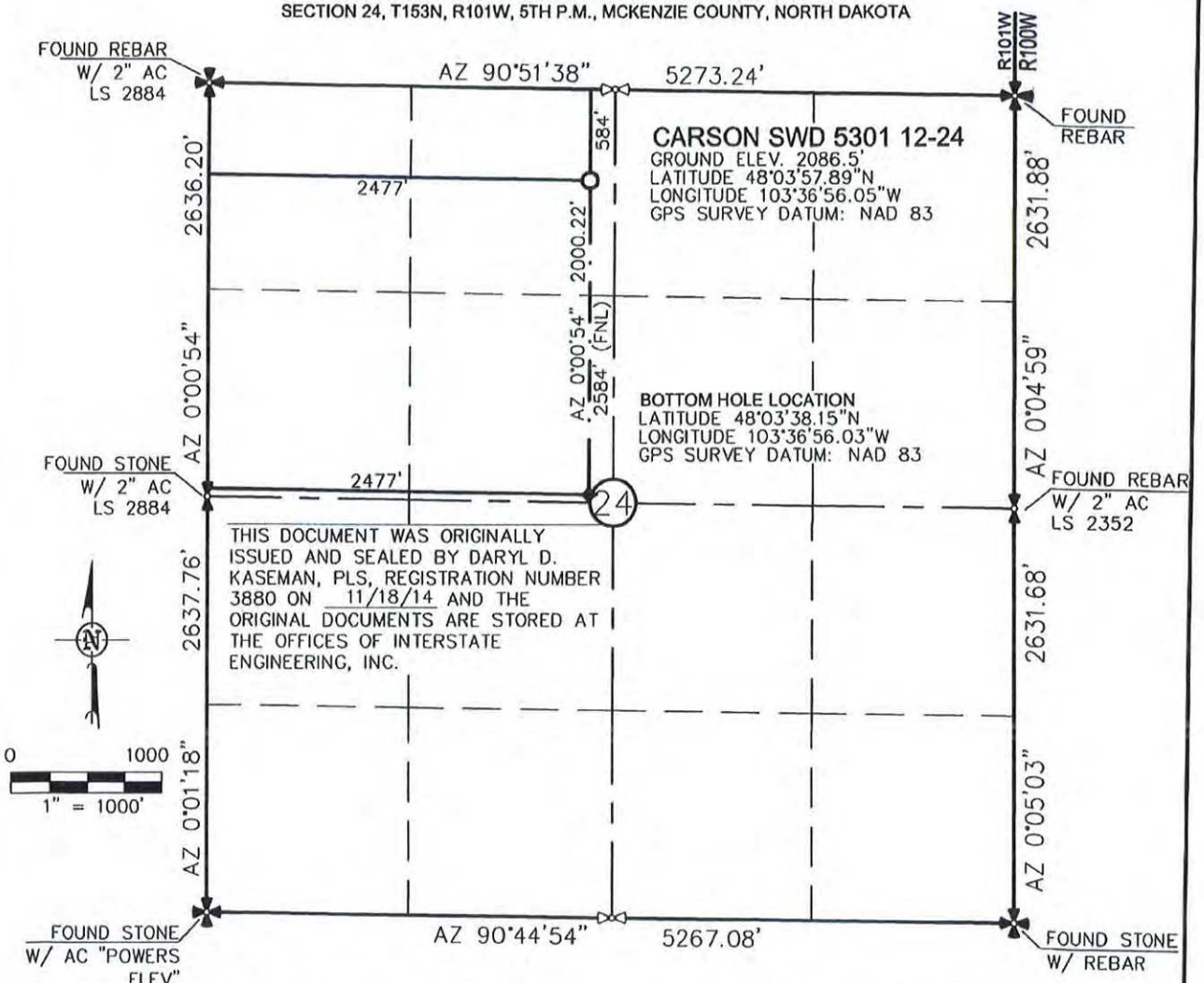
FOR STATE USE ONLY

Date Approved	By	Title
3 / 20 / 2015	Kevin Connors	UICCCS Supervisor

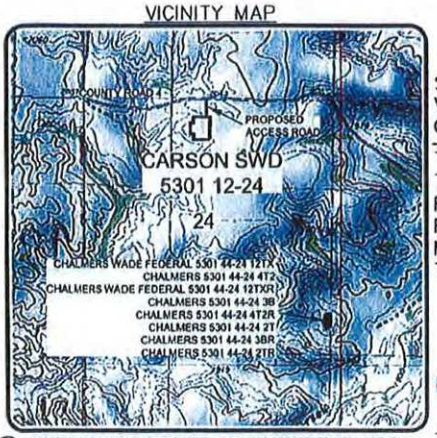
REQUIRED ATTACHMENTS: Certified surveyors plat, estimated geological tops, proposed mud/cementing plans, $100 fee.

WELL LOCATION PLAT

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



VICINITY MAP



- MONUMENT - RECOVERED
- MONUMENT - NOT RECOVERED

STAKED ON 11/18/14
VERTICAL CONTROL DATUM WAS BASED UPON CONTROL POINT 130856 WITH AN ELEVATION OF 2089.7'

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.

REGISTERED LAND SURVEYOR
DARYL D. KASEMAN
LS-3880
DATE: 11/18/14
NORTH DAKOTA

DARYL D. KASEMAN LS-3880

SHEET NO.

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Sidney, Montana 59270
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Fax (406) 433-5618
www.interstateeng.com
Other offices in Minnesota, North Dakota and South Dakota

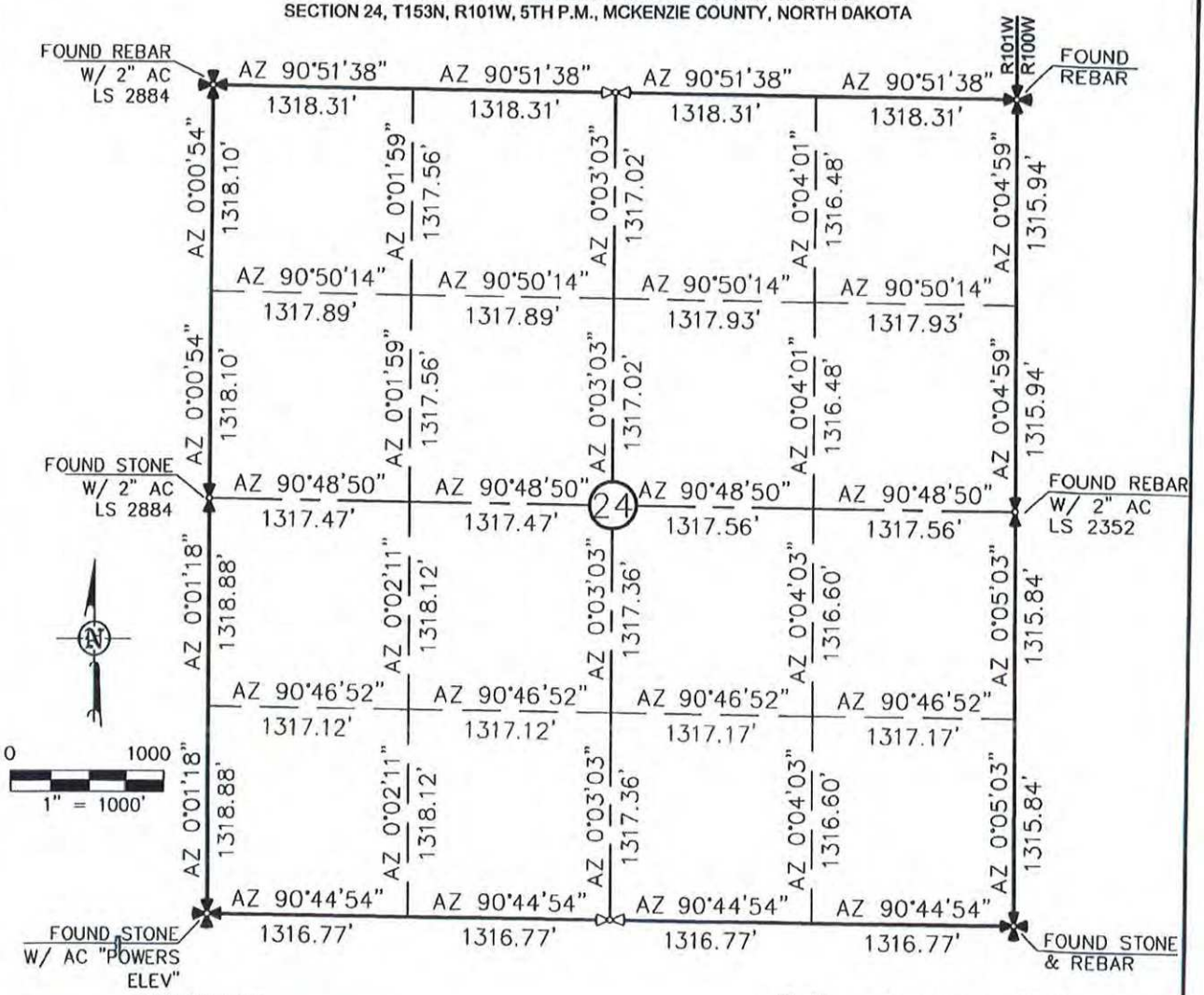
OASIS PETROLEUM NORTH AMERICA, LLC
WELL LOCATION PLAT
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. | Project No.: S14-09-254
Checked By: D.D.K. | Date: NOV. 2014

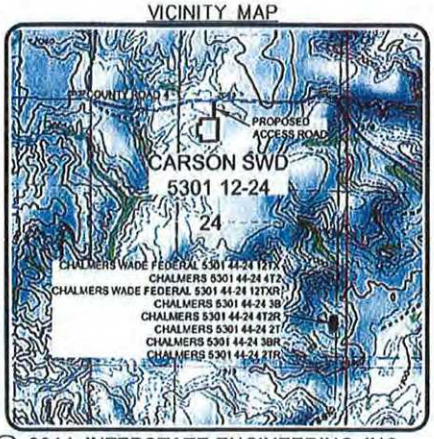
Revision No.	Date	By	Description

SECTION BREAKDOWN

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



VICINITY MAP



- MONUMENT - RECOVERED
- MONUMENT - NOT RECOVERED

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ALL AZIMUTHS ARE BASED ON G.P.S. OBSERVATIONS. THE ORIGINAL SURVEY OF THIS AREA FOR THE GENERAL LAND OFFICE (G.L.O.) WAS 1901. 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'

REGISTERED LAND SURVEYOR
DARYL D. KASEMAN
LS-3880
DATE: 11/18/14
NORTH DAKOTA

SHEET NO. 1

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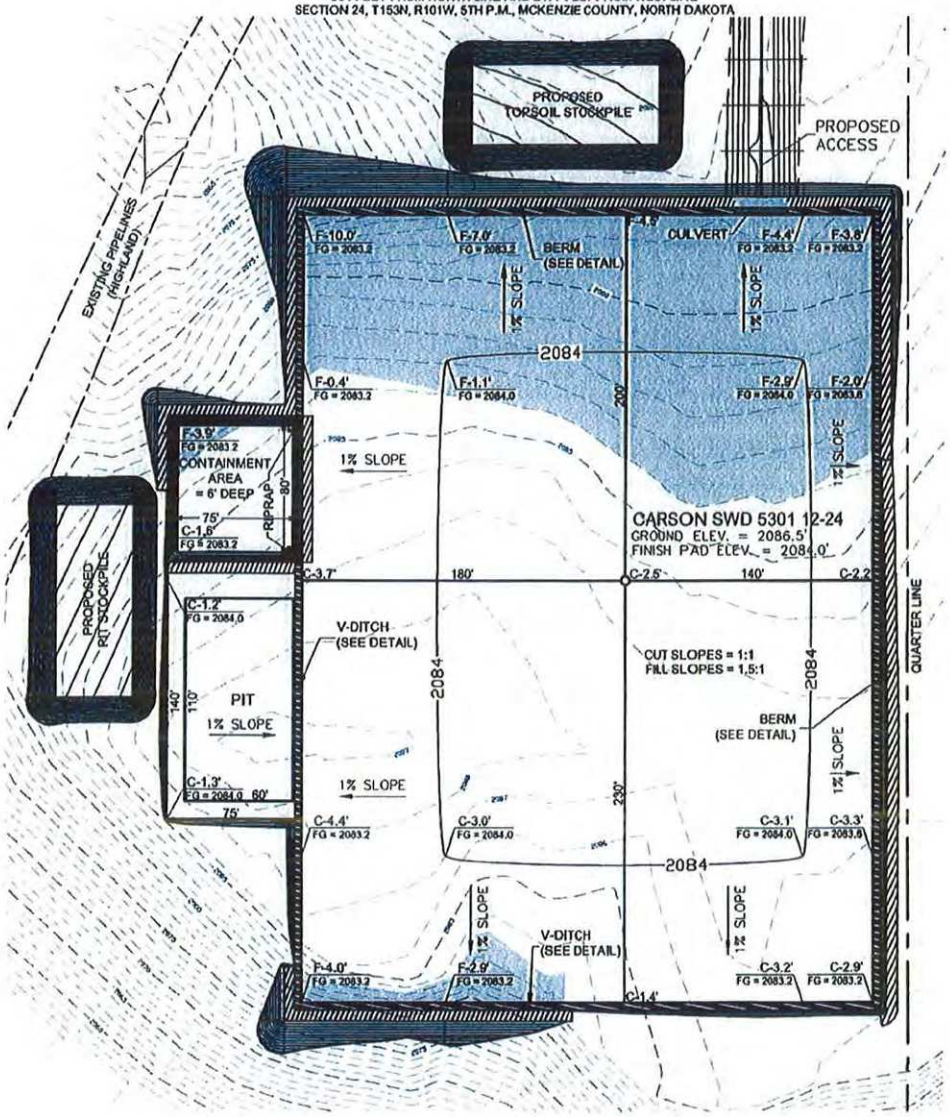
OASIS PETROLEUM NORTH AMERICA, LLC
SECTION BREAKDOWN
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. | Project No.: 514-09-254
Checked By: D.D.K. | Date: NOV. 2014

Revision No.	Date	By	Description

PAD LAYOUT

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



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

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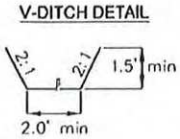
REGISTERED LAND SURVEYOR
DARYL D. KASEMAN
LS-3880
DATE: 11/18/14
NORTH DAKOTA

V-DITCH DETAIL



BERM — Proposed Contours
DITCH — Original Contours

N

0 60
1" = 60'

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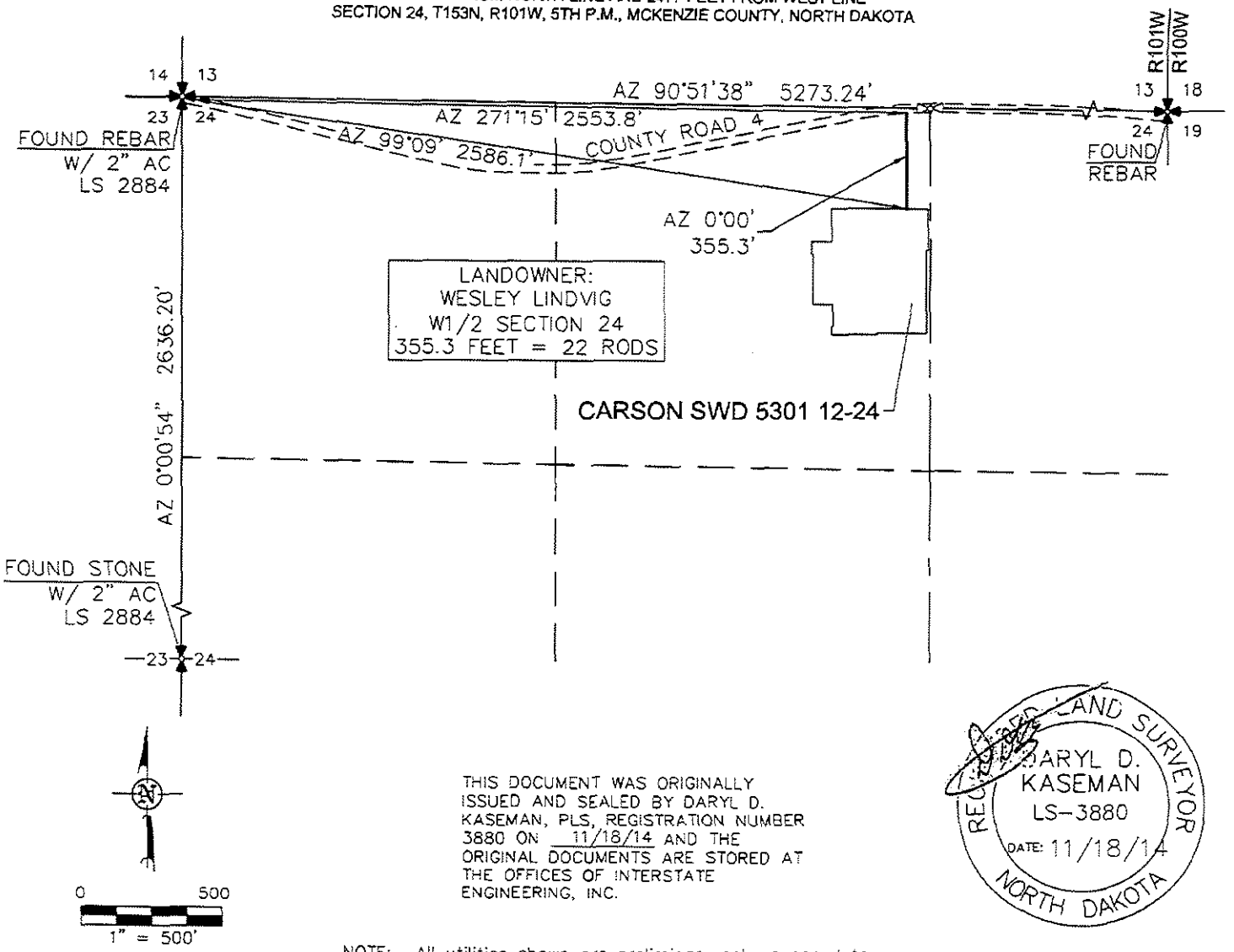
Other offices in Minnesota, North Dakota and South Dakota

OASIS PETROLEUM NORTH AMERICA, LLC
PAD LAYOUT
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA
Drawn By: B.H.H. Project No.: 514-09-154
Checked By: D.D.K. Date: NOV. 2014

Rev. No.	Date	By	Description

ACCESS APPROACH

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



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REGISTERED LAND SURVEYOR
DARYL D.
KASEMAN
LS-3880
DATE: 11/18/14
NORTH DAKOTA

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

OASIS PETROLEUM NORTH AMERICA, LLC
ACCESS APPROACH
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA
Drawn By: BHH | Project No.: S14-09-254
Checked By: D.D.K | Date: NOV 2014

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INTERSTATE ENGINEERING

SHEET NO.

WELL LOCATION SITE QUANTITIES

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA

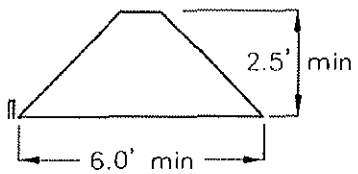
WELL SITE ELEVATION	2086.5
WELL PAD ELEVATION	2084.0

EXCAVATION	12,315
PLUS PIT	3,150
ACCESS ROAD (CUT)	27
	15,492
EMBANKMENT	6,588
PLUS SHRINKAGE (30%)	1,976
ACCESS ROAD (FILL)	1,441
	10,005
STOCKPILE PIT	3,150
STOCKPILE TOP SOIL (6")	3,243
BERMS	1,332 LF = 432 CY
DITCHES	1,420 LF = 217 CY
CONTAINMENT AREA	1,121 CY
STOCKPILE MATERIAL	0
DISTURBED AREA FROM PAD	4.02 ACRES

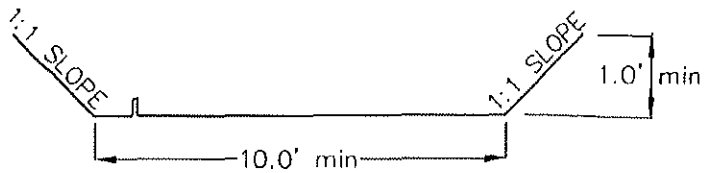
NOTE: ALL QUANTITIES ARE IN CUBIC YARDS (UNLESS NOTED)
CUT END SLOPES AT 1:1
FILL END SLOPES AT 1.5:1

WELL SITE LOCATION
584' FNL
2477' FWL

BERM DETAIL



DIVERSION DITCH DETAIL



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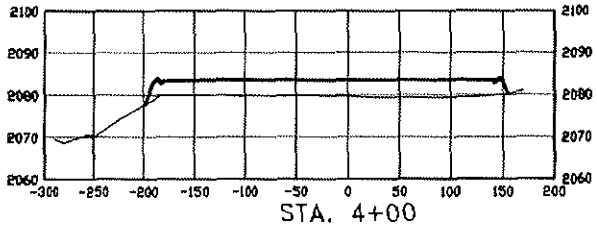
OASIS PETROLEUM NORTH AMERICA, LLC
QUANTITIES
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: BH/JL | Project No.: S14-09-254
Checked By: DBX | Date: NOV. 2014

Revision No.	Date	By	Description

CROSS SECTIONS

OASIS PETROLEUM NORTH AMERICA, LLC
1001 FANNIN, SUITE 1500, HOUSTON, TX 77002
"CARSON SWD 5301 12-24"
584 FEET FROM NORTH LINE AND 2477 FEET FROM WEST LINE
SECTION 24, T153N, R101W, 5TH P.M., MCKENZIE COUNTY, NORTH DAKOTA



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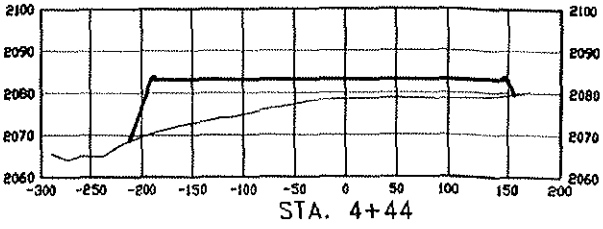

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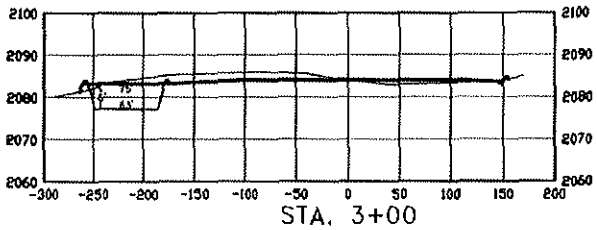

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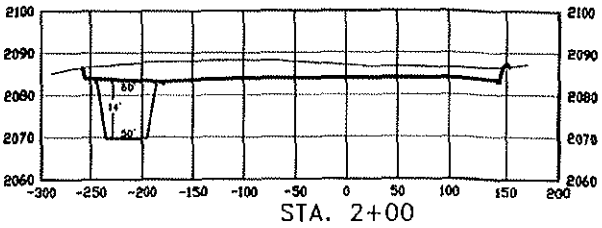

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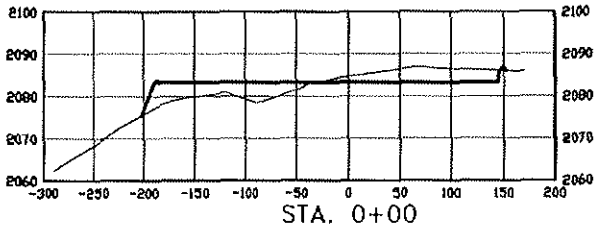

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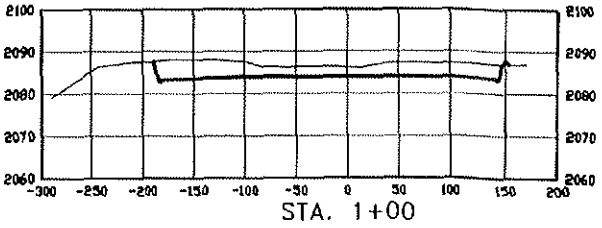

STA. 1+00

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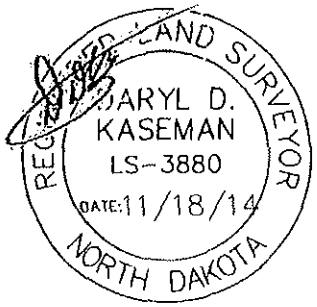

SCALE
HORIZ 1"=160'
VERT 1"=40'

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OASIS PETROLEUM NORTH AMERICA, LLC
PAD CROSS SECTIONS
SECTION 24, T153N, R101W
MCKENZIE COUNTY, NORTH DAKOTA

Drawn By: B.H.H. | Project No.: 614.09.254
Checked By: D.D.K. | Date: NOV. 2014

Revision No.	Date	By	Description

DRILLING PLAN

PROSPECT/FIELD	Cottonwood Field	Slant Dakota Water Disposal Well	COUNTY/STATE	Mountrail Co., ND
OPERATOR	Oasis Petroleum		RIG	TBD
WELL NAME	Carson SWD 5301 12-24			
LOCATION	Surface Location (survey plat):			
EST. T.D.	7,254		GROUND ELEV:	2084 Finished Pad Elev. Sub Hieght: 25
			KB ELEV:	2109

PROGNOSIS: Based on 2,109' KB(est)

MARKER	DEPTH (Surf Loc)	DATUM (Surf Loc)
Pierre	2,059	50
Greenhorn	4,606	-2497
Mowry	4,997	-2888
Newcastle	5,126	-3017
Dakota Top	5,421	-3312
First Dakota Sand Top	5,489	-3380
First Dakota Sand Base	5,544	-3435
Second Dakota Sand Top	5,671	-3562
Second Dakota Sand Base	5,709	-3600
Third Dakota Sand Top	5,779	-3670
Third Dakota Sand Base	5,863	-3754
TD well	5,878	-3769
Swift	6,061	-3952
Rierdon	6,377	-4268

LOGS: Type / Interval

OH Logs: None

CBL/GR: Above top of cement/GR to base of casing

DEVIATION: 8deg/100' curve, slant well

DST'S: None planned

CORES: None planned

MUDLOGGING: 30' samples during curve and through Dakota

BOP: 11" 5000 psi blind, pipe & annular

Max. Anticipated BHP: 2370

Surface Formation: *Glacial till*

MUD:	Interval			Type	WT	Vis	WL	Remarks
Surface	0'	-	2,159'	FW/Gel Lime Sweeps	8.6 - 8.9	28-34	NC	Circ Mud Tanks
Intermediate	2,159'	-	7,254'	Invert	9.0-10.0	40-60	HTHP	Circ Mud Tanks

CASING:	Size	Wt ppf	Hole	Depth	Cement	WOC	Remarks
Surface:	9 5/8"	36	13 1/2"	2,159	To surface	12 hours	
Intermediate:	7"	26	8 3/4"	7,254	2,159	12 hours	Back to srf shoe

PROBABLE PLUGS, IF REQ'D:

Plug from TD of vertical = 5,965' to 150' above KOP = 4,800'. Total of 1,140'

OTHER:	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI	
Surface:	2,159	2,159	584' FNL	2477' FWL	T153N-R101W-Sec. 24		Build Rate: 8 deg /100'
KOP:	4,797	4,797	584' FNL	2477' FWL	T153N-R101W-Sec. 24		
EOC:	5,736	5,489	1117' FNL	2477' FWL	T153N-R101W-Sec. 24	180.0	
Dakota Slant TD/ Casing Point	7,254	5,878	2584' FNL	2477' FWL	T153N-R101W-Sec. 24	180.0	

Comments:

MWD survey every 100'. Place Cement Kickoff Plug

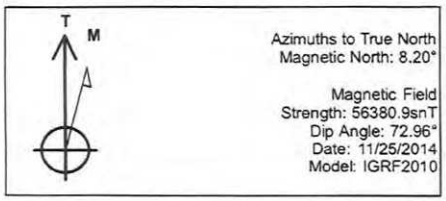
TIH with 8-3/4" Curve assembly and build curve. MWD Survey every 30'. Land Curve , top of Dakota formation

Drill slant with 8-3/4" bit and rotate down to TD. MWD Survey every 30'. Run 7" casing and cement

Reserve pit fluids will be hauled to the nearest disposal site/Reserve pit solids will be solidified and reclaimed in the lined reserve pit

OASIS PETROLEUM

Geology: BMC 10-30-2014 Engineering: Agonzalez11-25-14



Azimuths to True North
Magnetic North: 8.20°

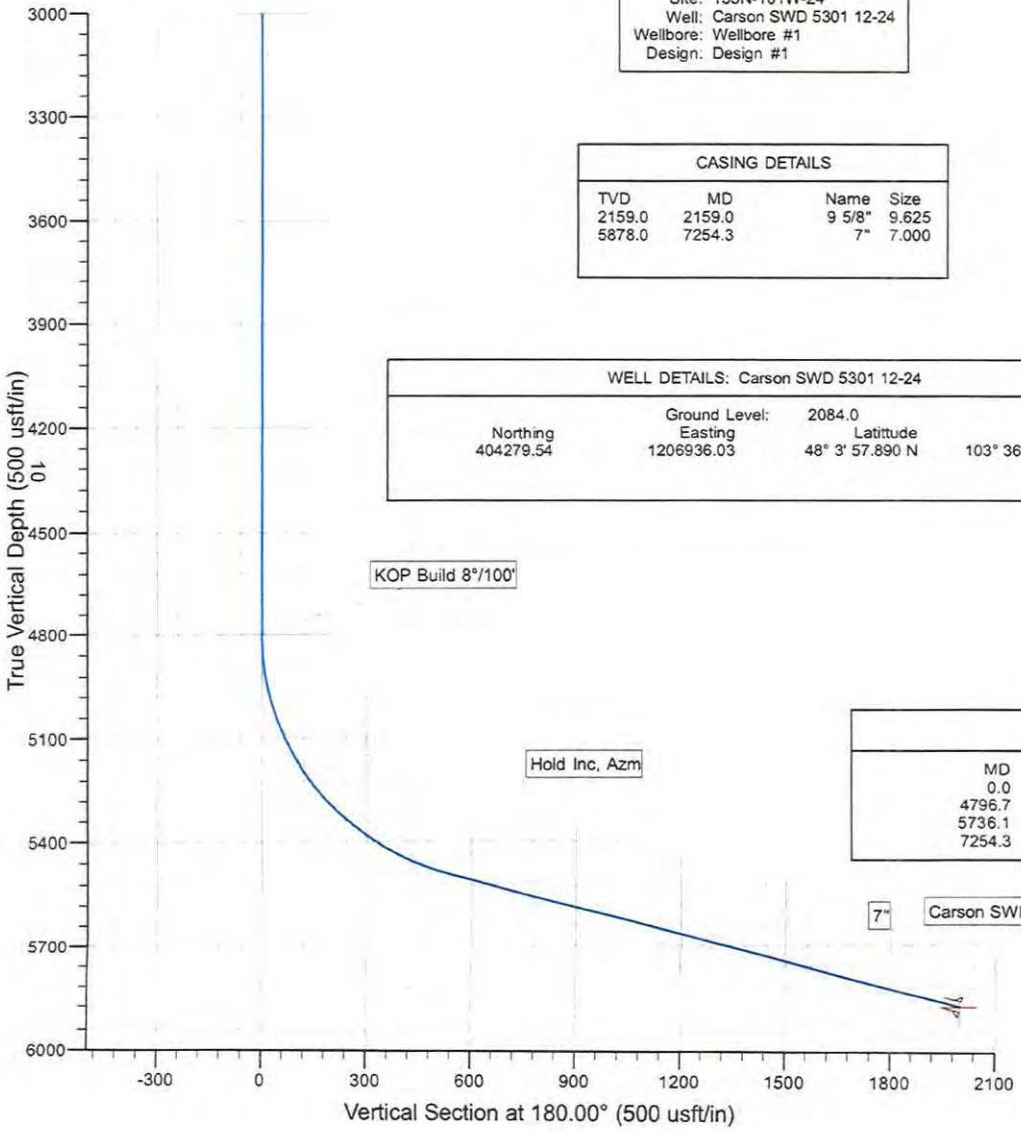
Magnetic Field
Strength: 56380.9snT
Dip Angle: 72.96°
Date: 11/25/2014
Model: IGRF2010

OASIS PETROLEUM

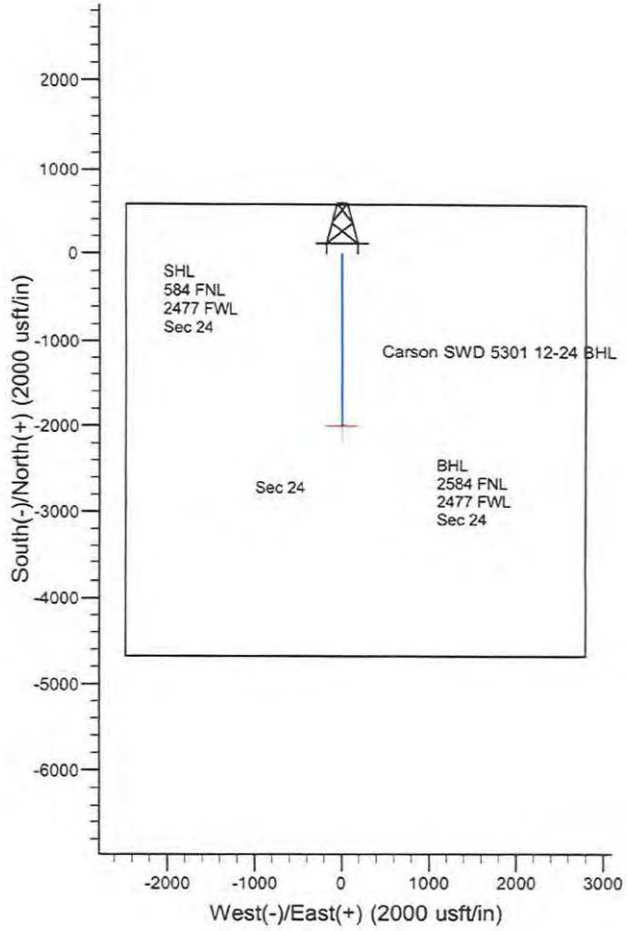
Project: Indian Hills
Site: 153N-101W-24
Well: Carson SWD 5301 12-24
Wellbore: Wellbore #1
Design: Design #1

CASING DETAILS			
TVD	MD	Name	Size
2159.0	2159.0	9 5/8"	9.625
5878.0	7254.3	7"	7.000

WELL DETAILS: Carson SWD 5301 12-24			
	Ground Level:	2084.0	
Northing	Easting	Latitude	Longitude
404279.54	1206936.03	48° 3' 57.890 N	103° 36' 56.050 W



SECTION DETAILS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	
4796.7	0.00	0.00	4796.7	0.0	0.0	0.00	
5736.1	75.15	180.00	5489.0	-532.7	0.0	8.00	
7254.3	75.15	180.00	5878.0	-2000.2	0.0	0.00	Carson SWD 5301 12-24 BHL



Oasis

Indian Hills
153N-101W-24
Carson SWD 5301 12-24

Wellbore #1

Plan: Design #1

Standard Planning Report

20 March, 2015

Database:	OpenWellsCompass - EDM Prod	**Local Co-ordinate Reference:**	Well Carson SWD 5301 12-24
Company:	Oasis	**TVD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Project:	Indian Hills	**MD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Site:	153N-101W-24	**North Reference:**	True
Well:	Carson SWD 5301 12-24	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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-101W-24				
Site Position:		**Northing:**	404,279.54 usft	**Latitude:**	48° 3' 57.890 N
From:	Lat/Long	**Easting:**	1,206,936.03 usft	**Longitude:**	103° 36' 56.050 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13.200 in	**Grid Convergence:**	-2.32 °

Well	Carson SWD 5301 12-24					
Well Position	**+N/-S**	0.0 usft	**Northing:**	404,279.54 usft	**Latitude:**	48° 3' 57.890 N
	+E/-W	0.0 usft	**Easting:**	1,206,936.03 usft	**Longitude:**	103° 36' 56.050 W
Position Uncertainty		2.0 usft	**Wellhead Elevation:**		**Ground Level:**	2,084.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	11/25/2014	8.20	72.96	56,381

Design	Design #1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	180.00	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	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	
4,796.7	0.00	0.00	4,796.7	0.0	0.0	0.00	0.00	0.00	0.00	
5,736.1	75.15	180.00	5,489.0	-532.7	0.0	8.00	8.00	-19.16	180.00	
7,254.3	75.15	180.00	5,878.0	-2,000.2	0.0	0.00	0.00	0.00	0.00	Carson SWD 5301 12

Database:	OpenWellsCompass - EDM Prod	**Local Co-ordinate Reference:**	Well Carson SWD 5301 12-24
Company:	Oasis	**TVD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Project:	Indian Hills	**MD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Site:	153N-101W-24	**North Reference:**	True
Well:	Carson SWD 5301 12-24	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,160.0	0.00	0.00	2,160.0	0.0	0.0	0.0	0.00	0.00	0.00
2,190.0	0.00	0.00	2,190.0	0.0	0.0	0.0	0.00	0.00	0.00
2,220.0	0.00	0.00	2,220.0	0.0	0.0	0.0	0.00	0.00	0.00
2,250.0	0.00	0.00	2,250.0	0.0	0.0	0.0	0.00	0.00	0.00
2,280.0	0.00	0.00	2,280.0	0.0	0.0	0.0	0.00	0.00	0.00
2,310.0	0.00	0.00	2,310.0	0.0	0.0	0.0	0.00	0.00	0.00
2,340.0	0.00	0.00	2,340.0	0.0	0.0	0.0	0.00	0.00	0.00
2,370.0	0.00	0.00	2,370.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,430.0	0.00	0.00	2,430.0	0.0	0.0	0.0	0.00	0.00	0.00
2,460.0	0.00	0.00	2,460.0	0.0	0.0	0.0	0.00	0.00	0.00
2,490.0	0.00	0.00	2,490.0	0.0	0.0	0.0	0.00	0.00	0.00
2,520.0	0.00	0.00	2,520.0	0.0	0.0	0.0	0.00	0.00	0.00
2,550.0	0.00	0.00	2,550.0	0.0	0.0	0.0	0.00	0.00	0.00
2,580.0	0.00	0.00	2,580.0	0.0	0.0	0.0	0.00	0.00	0.00
2,610.0	0.00	0.00	2,610.0	0.0	0.0	0.0	0.00	0.00	0.00
2,640.0	0.00	0.00	2,640.0	0.0	0.0	0.0	0.00	0.00	0.00
2,670.0	0.00	0.00	2,670.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,730.0	0.00	0.00	2,730.0	0.0	0.0	0.0	0.00	0.00	0.00
2,760.0	0.00	0.00	2,760.0	0.0	0.0	0.0	0.00	0.00	0.00
2,790.0	0.00	0.00	2,790.0	0.0	0.0	0.0	0.00	0.00	0.00
2,820.0	0.00	0.00	2,820.0	0.0	0.0	0.0	0.00	0.00	0.00
2,850.0	0.00	0.00	2,850.0	0.0	0.0	0.0	0.00	0.00	0.00
2,880.0	0.00	0.00	2,880.0	0.0	0.0	0.0	0.00	0.00	0.00
2,910.0	0.00	0.00	2,910.0	0.0	0.0	0.0	0.00	0.00	0.00
2,940.0	0.00	0.00	2,940.0	0.0	0.0	0.0	0.00	0.00	0.00
2,970.0	0.00	0.00	2,970.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,030.0	0.00	0.00	3,030.0	0.0	0.0	0.0	0.00	0.00	0.00
3,060.0	0.00	0.00	3,060.0	0.0	0.0	0.0	0.00	0.00	0.00
3,090.0	0.00	0.00	3,090.0	0.0	0.0	0.0	0.00	0.00	0.00
3,120.0	0.00	0.00	3,120.0	0.0	0.0	0.0	0.00	0.00	0.00
3,150.0	0.00	0.00	3,150.0	0.0	0.0	0.0	0.00	0.00	0.00
3,180.0	0.00	0.00	3,180.0	0.0	0.0	0.0	0.00	0.00	0.00
3,210.0	0.00	0.00	3,210.0	0.0	0.0	0.0	0.00	0.00	0.00
3,240.0	0.00	0.00	3,240.0	0.0	0.0	0.0	0.00	0.00	0.00
3,270.0	0.00	0.00	3,270.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,330.0	0.00	0.00	3,330.0	0.0	0.0	0.0	0.00	0.00	0.00
3,360.0	0.00	0.00	3,360.0	0.0	0.0	0.0	0.00	0.00	0.00
3,390.0	0.00	0.00	3,390.0	0.0	0.0	0.0	0.00	0.00	0.00
3,420.0	0.00	0.00	3,420.0	0.0	0.0	0.0	0.00	0.00	0.00
3,450.0	0.00	0.00	3,450.0	0.0	0.0	0.0	0.00	0.00	0.00
3,480.0	0.00	0.00	3,480.0	0.0	0.0	0.0	0.00	0.00	0.00
3,510.0	0.00	0.00	3,510.0	0.0	0.0	0.0	0.00	0.00	0.00
3,540.0	0.00	0.00	3,540.0	0.0	0.0	0.0	0.00	0.00	0.00
3,570.0	0.00	0.00	3,570.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,630.0	0.00	0.00	3,630.0	0.0	0.0	0.0	0.00	0.00	0.00
3,660.0	0.00	0.00	3,660.0	0.0	0.0	0.0	0.00	0.00	0.00
3,690.0	0.00	0.00	3,690.0	0.0	0.0	0.0	0.00	0.00	0.00
3,720.0	0.00	0.00	3,720.0	0.0	0.0	0.0	0.00	0.00	0.00
3,750.0	0.00	0.00	3,750.0	0.0	0.0	0.0	0.00	0.00	0.00
3,780.0	0.00	0.00	3,780.0	0.0	0.0	0.0	0.00	0.00	0.00

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Project:	Indian Hills	**MD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Site:	153N-101W-24	**North Reference:**	True
Well:	Carson SWD 5301 12-24	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,810.0	0.00	0.00	3,810.0	0.0	0.0	0.0	0.00	0.00	0.00
3,840.0	0.00	0.00	3,840.0	0.0	0.0	0.0	0.00	0.00	0.00
3,870.0	0.00	0.00	3,870.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,930.0	0.00	0.00	3,930.0	0.0	0.0	0.0	0.00	0.00	0.00
3,960.0	0.00	0.00	3,960.0	0.0	0.0	0.0	0.00	0.00	0.00
3,990.0	0.00	0.00	3,990.0	0.0	0.0	0.0	0.00	0.00	0.00
4,020.0	0.00	0.00	4,020.0	0.0	0.0	0.0	0.00	0.00	0.00
4,050.0	0.00	0.00	4,050.0	0.0	0.0	0.0	0.00	0.00	0.00
4,080.0	0.00	0.00	4,080.0	0.0	0.0	0.0	0.00	0.00	0.00
4,110.0	0.00	0.00	4,110.0	0.0	0.0	0.0	0.00	0.00	0.00
4,140.0	0.00	0.00	4,140.0	0.0	0.0	0.0	0.00	0.00	0.00
4,170.0	0.00	0.00	4,170.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,230.0	0.00	0.00	4,230.0	0.0	0.0	0.0	0.00	0.00	0.00
4,260.0	0.00	0.00	4,260.0	0.0	0.0	0.0	0.00	0.00	0.00
4,290.0	0.00	0.00	4,290.0	0.0	0.0	0.0	0.00	0.00	0.00
4,320.0	0.00	0.00	4,320.0	0.0	0.0	0.0	0.00	0.00	0.00
4,350.0	0.00	0.00	4,350.0	0.0	0.0	0.0	0.00	0.00	0.00
4,380.0	0.00	0.00	4,380.0	0.0	0.0	0.0	0.00	0.00	0.00
4,410.0	0.00	0.00	4,410.0	0.0	0.0	0.0	0.00	0.00	0.00
4,440.0	0.00	0.00	4,440.0	0.0	0.0	0.0	0.00	0.00	0.00
4,470.0	0.00	0.00	4,470.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,530.0	0.00	0.00	4,530.0	0.0	0.0	0.0	0.00	0.00	0.00
4,560.0	0.00	0.00	4,560.0	0.0	0.0	0.0	0.00	0.00	0.00
4,590.0	0.00	0.00	4,590.0	0.0	0.0	0.0	0.00	0.00	0.00
4,606.0	0.00	0.00	4,606.0	0.0	0.0	0.0	0.00	0.00	0.00
Greenhorn									
4,620.0	0.00	0.00	4,620.0	0.0	0.0	0.0	0.00	0.00	0.00
4,650.0	0.00	0.00	4,650.0	0.0	0.0	0.0	0.00	0.00	0.00
4,680.0	0.00	0.00	4,680.0	0.0	0.0	0.0	0.00	0.00	0.00
4,710.0	0.00	0.00	4,710.0	0.0	0.0	0.0	0.00	0.00	0.00
4,740.0	0.00	0.00	4,740.0	0.0	0.0	0.0	0.00	0.00	0.00
4,770.0	0.00	0.00	4,770.0	0.0	0.0	0.0	0.00	0.00	0.00
4,796.7	0.00	0.00	4,796.7	0.0	0.0	0.0	0.00	0.00	0.00
KOP Build 8°/100'									
4,800.0	0.26	180.00	4,800.0	0.0	0.0	0.0	8.00	8.00	0.00
4,830.0	2.66	180.00	4,830.0	-0.8	0.0	0.8	8.00	8.00	0.00
4,860.0	5.06	180.00	4,859.9	-2.8	0.0	2.8	8.00	8.00	0.00
4,890.0	7.46	180.00	4,889.7	-6.1	0.0	6.1	8.00	8.00	0.00
4,920.0	9.86	180.00	4,919.4	-10.6	0.0	10.6	8.00	8.00	0.00
4,950.0	12.26	180.00	4,948.8	-16.3	0.0	16.3	8.00	8.00	0.00
4,980.0	14.66	180.00	4,978.0	-23.3	0.0	23.3	8.00	8.00	0.00
4,999.7	16.24	180.00	4,997.0	-28.6	0.0	28.6	8.00	8.00	0.00
Mowry									
5,010.0	17.06	180.00	5,006.9	-31.5	0.0	31.5	8.00	8.00	0.00
5,040.0	19.46	180.00	5,035.3	-40.9	0.0	40.9	8.00	8.00	0.00
5,070.0	21.86	180.00	5,063.4	-51.5	0.0	51.5	8.00	8.00	0.00
5,100.0	24.26	180.00	5,091.0	-63.3	0.0	63.3	8.00	8.00	0.00
5,130.0	26.66	180.00	5,118.1	-76.2	0.0	76.2	8.00	8.00	0.00
5,160.0	29.06	180.00	5,144.6	-90.2	0.0	90.2	8.00	8.00	0.00
5,190.0	31.46	180.00	5,170.5	-105.3	0.0	105.3	8.00	8.00	0.00
5,220.0	33.86	180.00	5,195.8	-121.5	0.0	121.5	8.00	8.00	0.00

Database:	OpenWellsCompass - EDM Prod	**Local Co-ordinate Reference:**	Well Carson SWD 5301 12-24
Company:	Oasis	**TVD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Project:	Indian Hills	**MD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Site:	153N-101W-24	**North Reference:**	True
Well:	Carson SWD 5301 12-24	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,250.0	36.26	180.00	5,220.3	-138.7	0.0	138.7	8.00	8.00	0.00
5,280.0	38.66	180.00	5,244.1	-157.0	0.0	157.0	8.00	8.00	0.00
5,310.0	41.06	180.00	5,267.2	-176.2	0.0	176.2	8.00	8.00	0.00
5,340.0	43.46	180.00	5,289.4	-196.4	0.0	196.4	8.00	8.00	0.00
5,370.0	45.86	180.00	5,310.7	-217.5	0.0	217.5	8.00	8.00	0.00
5,400.0	48.26	180.00	5,331.1	-239.4	0.0	239.4	8.00	8.00	0.00
5,430.0	50.66	180.00	5,350.6	-262.2	0.0	262.2	8.00	8.00	0.00
5,460.0	53.06	180.00	5,369.2	-285.8	0.0	285.8	8.00	8.00	0.00
5,490.0	55.46	180.00	5,386.7	-310.2	0.0	310.2	8.00	8.00	0.00
5,520.0	57.86	180.00	5,403.2	-335.2	0.0	335.2	8.00	8.00	0.00
5,550.0	60.26	180.00	5,418.6	-361.0	0.0	361.0	8.00	8.00	0.00
5,554.9	60.66	180.00	5,421.0	-365.2	0.0	365.2	8.00	8.00	0.00
Dakota Top									
5,580.0	62.66	180.00	5,432.9	-387.3	0.0	387.3	8.00	8.00	0.00
5,610.0	65.06	180.00	5,446.1	-414.2	0.0	414.2	8.00	8.00	0.00
5,640.0	67.46	180.00	5,458.2	-441.7	0.0	441.7	8.00	8.00	0.00
5,670.0	69.86	180.00	5,469.1	-469.6	0.0	469.6	8.00	8.00	0.00
5,700.0	72.26	180.00	5,478.9	-498.0	0.0	498.0	8.00	8.00	0.00
5,730.0	74.66	180.00	5,487.4	-526.8	0.0	526.8	8.00	8.00	0.00
5,736.1	75.15	180.00	5,489.0	-532.7	0.0	532.7	8.00	8.00	0.00
Hold Inc, Azm									
5,736.2	75.15	180.00	5,489.0	-532.7	0.0	532.7	1.57	1.57	0.00
First Dakota Sand Top									
5,760.0	75.15	180.00	5,495.1	-555.8	0.0	555.8	0.00	0.00	0.00
5,790.0	75.15	180.00	5,502.8	-584.8	0.0	584.8	0.00	0.00	0.00
5,820.0	75.15	180.00	5,510.5	-613.8	0.0	613.8	0.00	0.00	0.00
5,850.0	75.15	180.00	5,518.2	-642.8	0.0	642.8	0.00	0.00	0.00
5,880.0	75.15	180.00	5,525.9	-671.8	0.0	671.8	0.00	0.00	0.00
5,910.0	75.15	180.00	5,533.5	-700.8	0.0	700.8	0.00	0.00	0.00
5,940.0	75.15	180.00	5,541.2	-729.8	0.0	729.8	0.00	0.00	0.00
5,950.8	75.15	180.00	5,544.0	-740.2	0.0	740.2	0.00	0.00	0.00
First Dakota Sand Base									
5,970.0	75.15	180.00	5,548.9	-758.8	0.0	758.8	0.00	0.00	0.00
6,000.0	75.15	180.00	5,556.6	-787.8	0.0	787.8	0.00	0.00	0.00
6,030.0	75.15	180.00	5,564.3	-816.8	0.0	816.8	0.00	0.00	0.00
6,060.0	75.15	180.00	5,572.0	-845.8	0.0	845.8	0.00	0.00	0.00
6,090.0	75.15	180.00	5,579.7	-874.8	0.0	874.8	0.00	0.00	0.00
6,120.0	75.15	180.00	5,587.4	-903.8	0.0	903.8	0.00	0.00	0.00
6,150.0	75.15	180.00	5,595.0	-932.8	0.0	932.8	0.00	0.00	0.00
6,180.0	75.15	180.00	5,602.7	-961.7	0.0	961.7	0.00	0.00	0.00
6,210.0	75.15	180.00	5,610.4	-990.7	0.0	990.7	0.00	0.00	0.00
6,240.0	75.15	180.00	5,618.1	-1,019.7	0.0	1,019.7	0.00	0.00	0.00
6,270.0	75.15	180.00	5,625.8	-1,048.7	0.0	1,048.7	0.00	0.00	0.00
6,300.0	75.15	180.00	5,633.5	-1,077.7	0.0	1,077.7	0.00	0.00	0.00
6,330.0	75.15	180.00	5,641.2	-1,106.7	0.0	1,106.7	0.00	0.00	0.00
6,360.0	75.15	180.00	5,648.8	-1,135.7	0.0	1,135.7	0.00	0.00	0.00
6,390.0	75.15	180.00	5,656.5	-1,164.7	0.0	1,164.7	0.00	0.00	0.00
6,420.0	75.15	180.00	5,664.2	-1,193.7	0.0	1,193.7	0.00	0.00	0.00
6,446.5	75.15	180.00	5,671.0	-1,219.3	0.0	1,219.3	0.00	0.00	0.00
Second Dakota Sand Top									
6,450.0	75.15	180.00	5,671.9	-1,222.7	0.0	1,222.7	0.00	0.00	0.00
6,480.0	75.15	180.00	5,679.6	-1,251.7	0.0	1,251.7	0.00	0.00	0.00
6,510.0	75.15	180.00	5,687.3	-1,280.7	0.0	1,280.7	0.00	0.00	0.00
6,540.0	75.15	180.00	5,695.0	-1,309.7	0.0	1,309.7	0.00	0.00	0.00
6,570.0	75.15	180.00	5,702.7	-1,338.7	0.0	1,338.7	0.00	0.00	0.00

Database:	OpenWellsCompass - EDM Prod	**Local Co-ordinate Reference:**	Well Carson SWD 5301 12-24
Company:	Oasis	**TVD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Project:	Indian Hills	**MD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Site:	153N-101W-24	**North Reference:**	True
Well:	Carson SWD 5301 12-24	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,594.8	75.15	180.00	5,709.0	-1,362.7	0.0	1,362.7	0.00	0.00	0.00
Second Dakota Sand Base									
6,600.0	75.15	180.00	5,710.3	-1,367.7	0.0	1,367.7	0.00	0.00	0.00
6,630.0	75.15	180.00	5,718.0	-1,396.7	0.0	1,396.7	0.00	0.00	0.00
6,660.0	75.15	180.00	5,725.7	-1,425.7	0.0	1,425.7	0.00	0.00	0.00
6,690.0	75.15	180.00	5,733.4	-1,454.7	0.0	1,454.7	0.00	0.00	0.00
6,720.0	75.15	180.00	5,741.1	-1,483.7	0.0	1,483.7	0.00	0.00	0.00
6,750.0	75.15	180.00	5,748.8	-1,512.7	0.0	1,512.7	0.00	0.00	0.00
6,780.0	75.15	180.00	5,756.5	-1,541.7	0.0	1,541.7	0.00	0.00	0.00
6,810.0	75.15	180.00	5,764.2	-1,570.7	0.0	1,570.7	0.00	0.00	0.00
6,840.0	75.15	180.00	5,771.8	-1,599.7	0.0	1,599.7	0.00	0.00	0.00
6,867.9	75.15	180.00	5,779.0	-1,626.7	0.0	1,626.7	0.00	0.00	0.00
Third Dakota Sand Top									
6,870.0	75.15	180.00	5,779.5	-1,628.7	0.0	1,628.7	0.00	0.00	0.00
6,900.0	75.15	180.00	5,787.2	-1,657.7	0.0	1,657.7	0.00	0.00	0.00
6,930.0	75.15	180.00	5,794.9	-1,686.7	0.0	1,686.7	0.00	0.00	0.00
6,960.0	75.15	180.00	5,802.6	-1,715.7	0.0	1,715.7	0.00	0.00	0.00
6,990.0	75.15	180.00	5,810.3	-1,744.7	0.0	1,744.7	0.00	0.00	0.00
7,020.0	75.15	180.00	5,818.0	-1,773.7	0.0	1,773.7	0.00	0.00	0.00
7,050.0	75.15	180.00	5,825.6	-1,802.7	0.0	1,802.7	0.00	0.00	0.00
7,080.0	75.15	180.00	5,833.3	-1,831.7	0.0	1,831.7	0.00	0.00	0.00
7,110.0	75.15	180.00	5,841.0	-1,860.7	0.0	1,860.7	0.00	0.00	0.00
7,140.0	75.15	180.00	5,848.7	-1,889.7	0.0	1,889.7	0.00	0.00	0.00
7,170.0	75.15	180.00	5,856.4	-1,918.7	0.0	1,918.7	0.00	0.00	0.00
7,195.8	75.15	180.00	5,863.0	-1,943.6	0.0	1,943.6	0.00	0.00	0.00
Third Dakota Sand Base									
7,200.0	75.15	180.00	5,864.1	-1,947.7	0.0	1,947.7	0.00	0.00	0.00
7,230.0	75.15	180.00	5,871.8	-1,976.7	0.0	1,976.7	0.00	0.00	0.00
7,254.3	75.15	180.00	5,878.0	-2,000.2	0.0	2,000.2	0.00	0.00	0.00
TD well - 7"									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Carson SWD 5301 12-2 - plan hits target center - Point	0.00	0.00	5,878.0	-2,000.2	0.0	402,280.98	1,206,855.12	48° 3' 38.150 N	103° 36' 56.050 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,159.0	2,159.0	9 5/8"	9.625	12.250
7,254.3	5,878.0	7"	7.000	8.750

Database:	OpenWellsCompass - EDM Prod	**Local Co-ordinate Reference:**	Well Carson SWD 5301 12-24
Company:	Oasis	**TVD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Project:	Indian Hills	**MD Reference:**	WELL @ 2109.0usft (Original Well Elev)
Site:	153N-101W-24	**North Reference:**	True
Well:	Carson SWD 5301 12-24	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,059.0	2,152.0	Pierre			
4,606.0	4,699.0	Greenhorn			
4,999.7	5,090.0	Mowry			
5,554.9	5,514.0	Dakota Top			
5,736.2	5,582.0	First Dakota Sand Top			
5,950.8	5,637.0	First Dakota Sand Base			
6,446.5	5,764.0	Second Dakota Sand Top			
6,594.8	5,802.0	Second Dakota Sand Base			
6,867.9	5,872.0	Third Dakota Sand Top			
7,195.8	5,956.0	Third Dakota Sand Base			
7,254.3	5,971.0	TD well			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
4,796.7	4,796.7	0.0	0.0	KOP Build 8°/100'
5,736.1	5,489.0	-532.7	0.0	Hold Inc, Azm

Oasis Petroleum
Well Summary
Carson SWD 5301 12-24
Section 24 T153N R101W
Mckenzie County, ND

SURFACE CASING AND CEMENT DESIGN

							Make-up Torque (ft-lbs)		
Size	Interval	Weight	Grade	Coupling	I.D.	Drift	Minimum	Optimum	Max
9-5/8"	0' - 2159'	36	J-55	LTC	8.921"	8.765"	3400	4530	5660

Interval	Description	Collapse	Burst	Tension
		(psi) / a	(psi) / b	(1000 lbs) / c
0' - 2159'	9-5/8", 36#, J-55, LTC, 8rd	2020 / 1.99	3520 / 3.48	453 / 2.71

API Rating & Safety Factor

a) Collapse based on full casing evacuation with 9 ppg fluid on backside (2159' setting
b) Burst pressure based on 9 ppg fluid with no fluid on backside (2159' setting depth).
c) Based on string weight in 9 ppg fluid at 2159' TVD plus 100k# overpull. (Buoyed weight equals 67k 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: **462 sks** (244 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
Carson SWD 5301 12-24
Section 24 T153N R101W
Mckenzie County, ND

INTERMEDIATE CASING AND CEMENT DESIGN

							Make-up Torque (ft-lbs)		
Size	Interval	Weight	Grade	Coupling	I.D.	Drift**	Minimum	Optimum	Max
7"	0' - 7254'	26	L-80	LTC	6.276"	6.151	3900	4900	5900

"Special Drift"

Interval	Length	Description	Collapse	Burst	Tension
			(psi) a	(psi) b	(1000 lbs) c
0' - 7254'	7254'	7", 26#,L-80, LTC, 8rd	5410 / 1.76*	7240 / 1.44	519 / 1.99

API Rating & Safety Factor

a) *Assume full casing evacuation with 10 ppg fluid on backside. **Assume full casing evacuation with psi/ft equivalent fluid gradient across salt intervals.

b) Burst pressure based on 5000 psig max press for stimulation plus 10 ppg fluid in casing and 10 ppg fluid on backside-to 5878' TVD.

c) Based on string weight in 10 ppg fluid, (160k 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 Tuned Spacer III

Lead Slurry: **216 sks** (100 bbls), 11.8 ppg, 2.55 cu. ft./sk Econocem Cement with .3% Fe-2 and .25 lb/sk Lost Circulation Additive

Tail Slurry: **293 sks** (86 bbls), 14.0 ppg, 1.55 cu. ft./sk Extendcem System with .2% HR-5 Retarder and .25 lb/sk Lost Circulation Additive

12/9/2014

Victoria Siemieniewski
Regulatory Specialist
Oasis Petroleum
1001 Fannin St.
Suite 1500
Houston, TX 77002

Kevin Connors
UIC/CCS Supervisor
North Dakota Industrial Commission
600 East Boulevard Avenue Dept. 405
Bismarck, ND 58505-0840

RE: Carson SWD 5301 12-24
Request for a legal street address

Dear Mr. Connors:

Oasis Petroleum has requested a physical street address for the subject well/well facility. The request was made to Aaron Chisholm, GIS Specialist, McKenzie County. Upon receiving a legal street address, Oasis will submit the address to the NDIC on a Sundry Notice (form 4) pursuant to 43-02-03-28.

Thank you for your consideration.

Respectfully,

Victoria Siemieniewski
Regulatory Specialist
Oasis Petroleum
281-404-9652

OASIS PETROLEUM

3/3/2015

Michael Kukuk
Regulatory Supervisor
Oasis Petroleum
1001 Fannin St.
Suite 1500
Houston, TX 77002

Kevin Connors
UIC/CCS Supervisor
North Dakota Industrial Commission
600 East Boulevard Avenue Dept. 405
Bismarck, ND 58505-0840

RE: Carson SWD 5301 12-24
Request for approach permit

Dear Mr. Connors:

Oasis Petroleum has requested a county approach permit for the subject well. If you prefer, Oasis will submit confirmation of receipt to your attention via email.

Thank you for your consideration.

Respectfully,

Michael Kukuk
Regulatory Supervisor
Oasis Petroleum
281-404-9575