

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-80587
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Wolverine Gas & Oil Company of Utah, LLC		7. If Unit or CA Agreement, Name and No. Wolverine Federal Unit
3a. Address 55 Campau NW Grand Rapids, MI 49503-2616		8. Lease Name and Well No. Twist Canyon Federal 21-1A
3b. Phone No. (include area code) 616-458-1150		9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 910' FSL, 1199' FWL, Sec 21, T21S, R1E At proposed prod. zone 2500' FSL, 1500' FWL, Sec 21, T21S, R1E		10. Field and Pool, or Exploratory Exploratory
14. Distance in miles and direction from nearest town or post office* 2.2 miles east-northeast of Salina, Utah		11. Sec., T, R, M. or Blk. and Survey or Area Section 21, T21S, R1E, SLB&M
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1500	16. No. of acres in lease 640	12. County or Parish Sevier
17. Spacing Unit dedicated to this well 40 acres	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. None	13. State UT
19. Proposed Depth 12,900' (12,550' TVD)	20. BLM/BIA Bond No. on file BLM WY3329	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5947' GR	22. Approximate date work will start* 09/12/2008	23. Estimated duration 120 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature:	Name (Printed/Typed) Edward A. Higuera	Date 09/19/2008
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Title **Manager - Development**

Approved by (Signature):	Name (Printed/Typed) Wayne A. Wetzel	Date 25 Sept 2008
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Title **Assoc. Field Manager** Office **Richfield Field Office**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached. **CONDITIONS OF APPROVAL FROM TWIST CYN 21-1 APPLY TO THIS A**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

RECEIVED

SEP 24 2008

Richfield BLM Field Office

CONFIDENTIAL

(TWIST CYN 21-1 APPROVED
23 JUNE 2008)



WOLVERINE GAS & OIL COMPANY

Location: UTAH Slot: Twist Canyon Federal 21-1A 910'FNL & 1199'FWL
 Field: SEVIER COUNTY Well: Twist Canyon Federal 21-1A
 Facility: SEC.21-T21S-R1E Wellbore: Twist Canyon Federal 21-1A PWB

Plot reference wellpath is Twist Canyon Federal 21-1A PWP Rev-B.0	
True vertical depths are referenced to SST 88 (RT)	Grid System: NAD83 / Lambert Utah State Planes, Central Zone (4302), US feet
Measured depths are referenced to SST 68 (RT)	North Reference: True north
SST 68 (RT) to Mean Sea Level: 5978 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: SEC.21-T21S-R1E): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: thomsuzz on 9/29/2008

Location Information

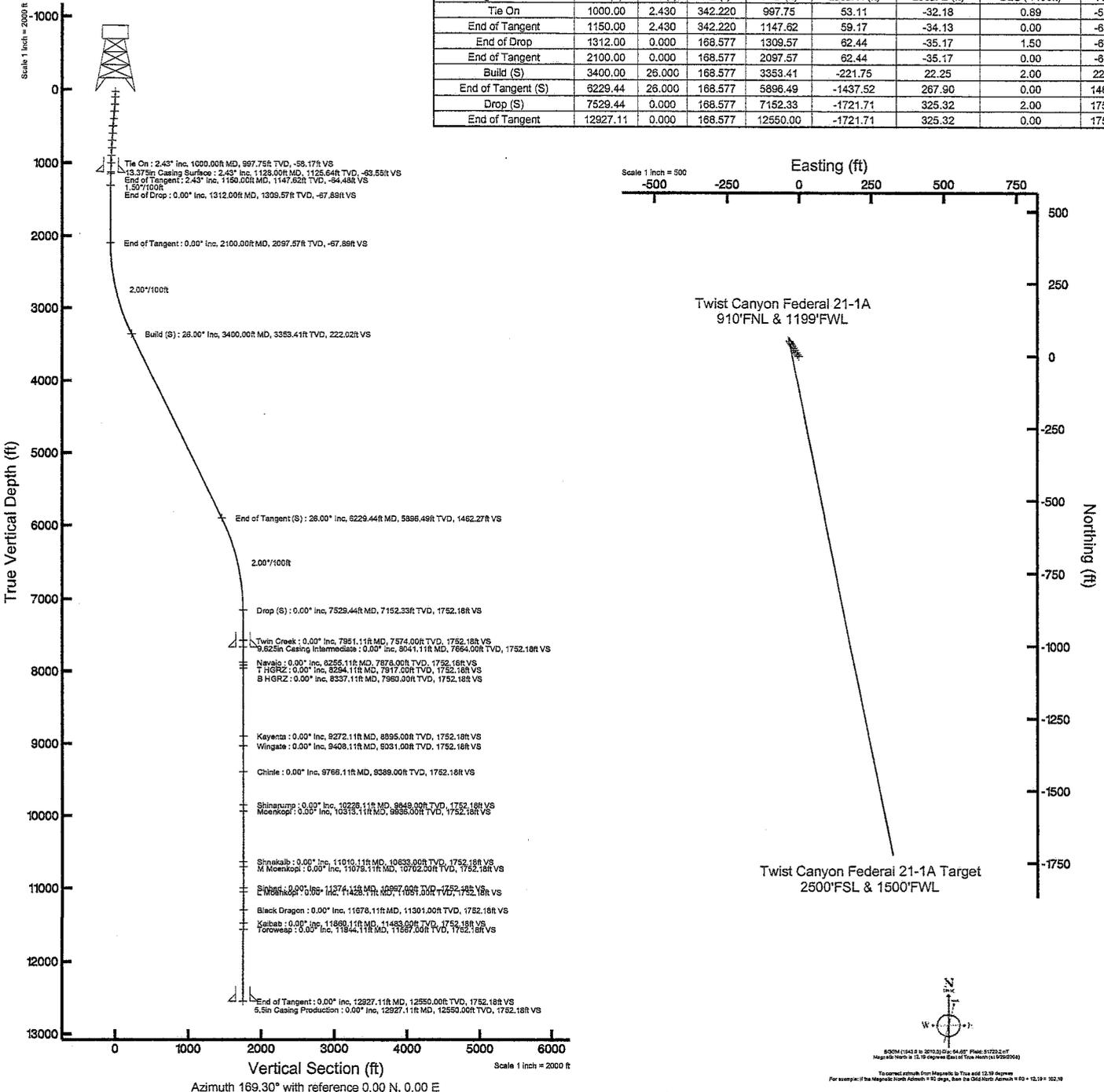
Facility Name	Grid East (USF)	Grid North (USF)	Latitude	Longitude
SEC.21-T21S-R1E	1682712.204	6794483.083	38°59'19.547"N	111°48'30.481"W
Slot	Local N (ft)	Local E (ft)	Latitude	Longitude
Twist Canyon Federal 21-1A 910'FNL & 1199'FWL	96.54	26.08	38°59'20.501"N	111°48'30.161"W
SST 88 (RT) to Mud line (Facility: SEC.21-T21S-R1E)			5978ft	
Mean Sea Level to Mud line (Facility: SEC.21-T21S-R1E)			0ft	
SST 68 (RT) to Mean Sea Level			5978ft	

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USF)	Grid North (USF)	Latitude	Longitude
Twist Canyon Federal 21-1A Target 2500'FSL & 1500'FWL	7978.00	-1721.71	325.32	1653058.00	6792858.69	38°58'03.483"N	111°48'28.042"W	

Well Profile Data

Design Comment	MD (ft)	inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (*/100ft)	VS (ft)
Tie On	1000.00	2.430	342.220	997.75	53.11	-32.18	0.89	-58.17
End of Tangent	1150.00	2.430	342.220	1147.62	59.17	-34.13	0.00	-64.48
End of Drop	1312.00	0.000	168.577	1309.57	62.44	-35.17	1.50	-67.89
End of Tangent	2100.00	0.000	168.577	2097.57	62.44	-35.17	0.00	-67.89
Build (S)	3400.00	26.000	168.577	3353.41	-221.75	22.25	2.00	-222.02
End of Tangent (S)	6229.44	26.000	168.577	5896.49	-1437.52	267.90	0.00	1462.27
Drop (S)	7529.44	0.000	168.577	7152.33	-1721.71	325.32	2.00	1752.18
End of Tangent	12927.11	0.000	168.577	12550.00	-1721.71	325.32	0.00	1752.18



SDMA 10013 is 3070.00' x 6400' Plus 31223.00' Mag North is 12.19 degrees East of True North (N 12582004)

To correct northings from Magnetic to True add 12.19 degrees

For example: if the Magnetic North Azimuth = 90 deg., then the True North Azimuth = 90 + 12.19 = 102.19

Planned Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	WOLVERINE GAS & OIL COMPANY	Slot	Twist Canyon Federal 21-1A 910'FNL & 1199'FWL
Area	UTAH	Well	Twist Canyon Federal 21-1A
Field	SEVIER COUNTY	Wellbore	Twist Canyon Federal 21-1A PWB
Facility	SEC.21-T21S-R1E	Sidetrack from	Twist Canyon Federal 21-1A AWB at 1000.00 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Utah State Planes, Central Zone (4302), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Thomsuzc
Scale	1.00001	Report Generated	9/29/2008 at 11:03:17 AM
Convergence at slot	0.20° West	Database/Source file	Denver/Twist Canyon Federal 21-1A_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	96.54	26.08	1552738.62	6794579.53	38°58'20.501"N	111°48'30.161"W
Facility Reference Pt			1552712.20	6794483.08	38°58'19.547"N	111°48'30.491"W
Field Reference Pt			1516134.37	6732217.32	38°48'02.619"N	111°56'09.781"W

WELLPATH DATUM

Calculation method	Minimum curvature	SST 68 (RT) to Facility Vertical Datum	5978.00ft
Horizontal Reference Pt	Slot	SST 68 (RT) to Mean Sea Level	5978.00ft
Vertical Reference Pt	SST 68 (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	SST 68 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	169.30°

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WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
0.00†	0.000	314.290	0.00	0.00	0.00	0.00	0.00
26.00	0.000	314.290	26.00	0.00	0.00	0.00	0.00
100.00	1.810	314.290	99.99	-0.96	0.82	-0.84	2.45
200.00	4.870	327.170	199.81	-6.18	5.49	-4.27	3.13
300.00	5.430	330.470	299.40	-14.59	13.17	-8.90	0.63
400.00	5.520	329.390	398.95	-23.59	21.43	-13.68	0.14
500.00	4.610	329.620	498.56	-31.90	29.03	-18.17	0.91
600.00	3.700	328.730	598.29	-38.71	35.26	-21.87	0.91
700.00	3.170	330.200	698.11	-44.34	40.42	-24.92	0.54
800.00	2.720	329.590	797.98	-49.19	44.86	-27.50	0.45
900.00	2.900	325.870	897.86	-53.74	49.00	-30.12	0.26
1000.00	2.430	342.220	997.75	-58.17	53.11	-32.18	0.89
1100.00†	2.430	342.220	1097.66	-62.37	57.15	-33.48	0.00
1150.00	2.430	342.220	1147.62	-64.48	59.17	-34.13	0.00
1200.00†	1.680	342.220	1197.58	-66.26	60.88	-34.67	1.50
1300.00†	0.180	342.220	1297.57	-67.87	62.42	-35.17	1.50
1312.00	0.000	168.577	1309.57	-67.89	62.44	-35.17	1.50
1400.00†	0.000	168.577	1397.57	-67.89	62.44	-35.17	0.00
1500.00†	0.000	168.577	1497.57	-67.89	62.44	-35.17	0.00
1600.00†	0.000	168.577	1597.57	-67.89	62.44	-35.17	0.00
1700.00†	0.000	168.577	1697.57	-67.89	62.44	-35.17	0.00
1800.00†	0.000	168.577	1797.57	-67.89	62.44	-35.17	0.00
1900.00†	0.000	168.577	1897.57	-67.89	62.44	-35.17	0.00
2000.00†	0.000	168.577	1997.57	-67.89	62.44	-35.17	0.00
2100.00	0.000	168.577	2097.57	-67.89	62.44	-35.17	0.00
2200.00†	2.000	168.577	2197.55	-66.14	60.73	-34.83	2.00
2300.00†	4.000	168.577	2297.41	-60.91	55.60	-33.79	2.00
2400.00†	6.000	168.577	2397.02	-52.19	47.06	-32.07	2.00
2500.00†	8.000	168.577	2496.27	-40.01	35.11	-29.65	2.00
2600.00†	10.000	168.577	2595.03	-24.37	19.78	-26.55	2.00
2700.00†	12.000	168.577	2693.19	-5.29	1.08	-22.78	2.00
2800.00†	14.000	168.577	2790.62	17.20	-20.97	-18.32	2.00
2900.00†	16.000	168.577	2887.21	43.08	-46.34	-13.20	2.00
3000.00†	18.000	168.577	2982.84	72.32	-74.99	-7.41	2.00
3100.00†	20.000	168.577	3077.38	104.87	-106.90	-0.96	2.00
3200.00†	22.000	168.577	3170.74	140.70	-142.03	6.14	2.00
3300.00†	24.000	168.577	3262.78	179.77	-180.33	13.88	2.00
3400.00	26.000	168.577	3353.41	222.02	-221.75	22.25	2.00
3500.00†	26.000	168.577	3443.29	265.86	-264.72	30.93	0.00
3600.00†	26.000	168.577	3533.17	309.69	-307.69	39.61	0.00
3700.00†	26.000	168.577	3623.05	353.53	-350.66	48.29	0.00
3800.00†	26.000	168.577	3712.93	397.36	-393.62	56.98	0.00
3900.00†	26.000	168.577	3802.81	441.19	-436.59	65.66	0.00
4000.00†	26.000	168.577	3892.69	485.03	-479.56	74.34	0.00
4100.00†	26.000	168.577	3982.57	528.86	-522.53	83.02	0.00

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WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
4200.00†	26.000	168.577	4072.44	572.69	-565.50	91.70	0.00
4300.00†	26.000	168.577	4162.32	616.53	-608.47	100.39	0.00
4400.00†	26.000	168.577	4252.20	660.36	-651.44	109.07	0.00
4500.00†	26.000	168.577	4342.08	704.19	-694.41	117.75	0.00
4600.00†	26.000	168.577	4431.96	748.03	-737.37	126.43	0.00
4700.00†	26.000	168.577	4521.84	791.86	-780.34	135.11	0.00
4800.00†	26.000	168.577	4611.72	835.70	-823.31	143.80	0.00
4900.00†	26.000	168.577	4701.60	879.53	-866.28	152.48	0.00
5000.00†	26.000	168.577	4791.48	923.36	-909.25	161.16	0.00
5100.00†	26.000	168.577	4881.36	967.20	-952.22	169.84	0.00
5200.00†	26.000	168.577	4971.24	1011.03	-995.19	178.52	0.00
5300.00†	26.000	168.577	5061.12	1054.86	-1038.16	187.21	0.00
5400.00†	26.000	168.577	5151.00	1098.70	-1081.13	195.89	0.00
5500.00†	26.000	168.577	5240.88	1142.53	-1124.09	204.57	0.00
5600.00†	26.000	168.577	5330.76	1186.36	-1167.06	213.25	0.00
5700.00†	26.000	168.577	5420.64	1230.20	-1210.03	221.93	0.00
5800.00†	26.000	168.577	5510.52	1274.03	-1253.00	230.62	0.00
5900.00†	26.000	168.577	5600.39	1317.87	-1295.97	239.30	0.00
6000.00†	26.000	168.577	5690.27	1361.70	-1338.94	247.98	0.00
6100.00†	26.000	168.577	5780.15	1405.53	-1381.91	256.66	0.00
6200.00†	26.000	168.577	5870.03	1449.37	-1424.88	265.34	0.00
6229.44	26.000	168.577	5896.49	1462.27	-1437.52	267.90	0.00
6300.00†	24.589	168.577	5960.29	1492.42	-1467.08	273.87	2.00
6400.00†	22.589	168.577	6051.93	1532.43	-1506.30	281.80	2.00
6500.00†	20.589	168.577	6144.91	1569.22	-1542.36	289.08	2.00
6600.00†	18.589	168.577	6239.11	1602.74	-1575.22	295.72	2.00
6700.00†	16.589	168.577	6334.43	1632.95	-1604.84	301.71	2.00
6800.00†	14.589	168.577	6430.75	1659.82	-1631.18	307.03	2.00
6900.00†	12.589	168.577	6527.95	1683.31	-1654.21	311.68	2.00
7000.00†	10.589	168.577	6625.90	1703.40	-1673.90	315.66	2.00
7100.00†	8.589	168.577	6724.50	1720.06	-1690.22	318.96	2.00
7200.00†	6.589	168.577	6823.62	1733.26	-1703.17	321.57	2.00
7300.00†	4.589	168.577	6923.14	1743.00	-1712.71	323.50	2.00
7400.00†	2.589	168.577	7022.94	1749.26	-1718.85	324.74	2.00
7500.00†	0.589	168.577	7122.90	1752.03	-1721.57	325.29	2.00
7529.44	0.000	168.577	7152.33 ¹	1752.18	-1721.71	325.32	2.00
7600.00†	0.000	168.577	7222.89	1752.18	-1721.71	325.32	0.00
7700.00†	0.000	168.577	7322.89	1752.18	-1721.71	325.32	0.00
7800.00†	0.000	168.577	7422.89	1752.18	-1721.71	325.32	0.00
7900.00†	0.000	168.577	7522.89	1752.18	-1721.71	325.32	0.00
8000.00†	0.000	168.577	7622.89	1752.18	-1721.71	325.32	0.00
8100.00†	0.000	168.577	7722.89	1752.18	-1721.71	325.32	0.00
8200.00†	0.000	168.577	7822.89	1752.18	-1721.71	325.32	0.00
8300.00†	0.000	168.577	7922.89	1752.18	-1721.71	325.32	0.00
8400.00†	0.000	168.577	8022.89	1752.18	-1721.71	325.32	0.00

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REFERENCE WELLPATH IDENTIFICATION			
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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
8500.00†	0.000	168.577	8122.89	1752.18	-1721.71	325.32	0.00
8600.00†	0.000	168.577	8222.89	1752.18	-1721.71	325.32	0.00
8700.00†	0.000	168.577	8322.89	1752.18	-1721.71	325.32	0.00
8800.00†	0.000	168.577	8422.89	1752.18	-1721.71	325.32	0.00
8900.00†	0.000	168.577	8522.89	1752.18	-1721.71	325.32	0.00
9000.00†	0.000	168.577	8622.89	1752.18	-1721.71	325.32	0.00
9100.00†	0.000	168.577	8722.89	1752.18	-1721.71	325.32	0.00
9200.00†	0.000	168.577	8822.89	1752.18	-1721.71	325.32	0.00
9300.00†	0.000	168.577	8922.89	1752.18	-1721.71	325.32	0.00
9400.00†	0.000	168.577	9022.89	1752.18	-1721.71	325.32	0.00
9500.00†	0.000	168.577	9122.89	1752.18	-1721.71	325.32	0.00
9600.00†	0.000	168.577	9222.89	1752.18	-1721.71	325.32	0.00
9700.00†	0.000	168.577	9322.89	1752.18	-1721.71	325.32	0.00
9800.00†	0.000	168.577	9422.89	1752.18	-1721.71	325.32	0.00
9900.00†	0.000	168.577	9522.89	1752.18	-1721.71	325.32	0.00
10000.00†	0.000	168.577	9622.89	1752.18	-1721.71	325.32	0.00
10100.00†	0.000	168.577	9722.89	1752.18	-1721.71	325.32	0.00
10200.00†	0.000	168.577	9822.89	1752.18	-1721.71	325.32	0.00
10300.00†	0.000	168.577	9922.89	1752.18	-1721.71	325.32	0.00
10400.00†	0.000	168.577	10022.89	1752.18	-1721.71	325.32	0.00
10500.00†	0.000	168.577	10122.89	1752.18	-1721.71	325.32	0.00
10600.00†	0.000	168.577	10222.89	1752.18	-1721.71	325.32	0.00
10700.00†	0.000	168.577	10322.89	1752.18	-1721.71	325.32	0.00
10800.00†	0.000	168.577	10422.89	1752.18	-1721.71	325.32	0.00
10900.00†	0.000	168.577	10522.89	1752.18	-1721.71	325.32	0.00
11000.00†	0.000	168.577	10622.89	1752.18	-1721.71	325.32	0.00
11100.00†	0.000	168.577	10722.89	1752.18	-1721.71	325.32	0.00
11200.00†	0.000	168.577	10822.89	1752.18	-1721.71	325.32	0.00
11300.00†	0.000	168.577	10922.89	1752.18	-1721.71	325.32	0.00
11400.00†	0.000	168.577	11022.89	1752.18	-1721.71	325.32	0.00
11500.00†	0.000	168.577	11122.89	1752.18	-1721.71	325.32	0.00
11600.00†	0.000	168.577	11222.89	1752.18	-1721.71	325.32	0.00
11700.00†	0.000	168.577	11322.89	1752.18	-1721.71	325.32	0.00
11800.00†	0.000	168.577	11422.89	1752.18	-1721.71	325.32	0.00
11900.00†	0.000	168.577	11522.89	1752.18	-1721.71	325.32	0.00
12000.00†	0.000	168.577	11622.89	1752.18	-1721.71	325.32	0.00
12100.00†	0.000	168.577	11722.89	1752.18	-1721.71	325.32	0.00
12200.00†	0.000	168.577	11822.89	1752.18	-1721.71	325.32	0.00
12300.00†	0.000	168.577	11922.89	1752.18	-1721.71	325.32	0.00
12400.00†	0.000	168.577	12022.89	1752.18	-1721.71	325.32	0.00
12500.00†	0.000	168.577	12122.89	1752.18	-1721.71	325.32	0.00
12600.00†	0.000	168.577	12222.89	1752.18	-1721.71	325.32	0.00
12700.00†	0.000	168.577	12322.89	1752.18	-1721.71	325.32	0.00
12800.00†	0.000	168.577	12422.89	1752.18	-1721.71	325.32	0.00
12900.00†	0.000	168.577	12522.89	1752.18	-1721.71	325.32	0.00

Planned Wellpath Report

Twist Canyon Federal 21-1A PWP Rev-B.0

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	WOLVERINE GAS & OIL COMPANY	Slot	Twist Canyon Federal 21-1A 910'FNL & 1199'FWL
Area	UTAH	Well	Twist Canyon Federal 21-1A
Field	SEVIER COUNTY	Wellbore	Twist Canyon Federal 21-1A PWB
Facility	SEC.21-T21S-R1E	Sidetrack from	Twist Canyon Federal 21-1A AWB at 1000.00 MD

WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
12927.11	0.000	168.577	12550.00	1752.18	-1721.71	325.32	0.00

HOLE & CASING SECTIONS

Ref Wellbore: Twist Canyon Federal 21-1A PWB Ref Wellpath: Twist Canyon Federal 21-1A PWP Rev-B.0

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	1128.00	1102.00	26.00	1125.64	0.00	0.00	58.28	-33.84
12.25in Open Hole	1128.00	8041.11	6913.11	1125.64	7664.00	58.28	-33.84	-1721.71	325.32
9.625in Casing Intermediate	26.00	8041.11	8015.11	26.00	7664.00	0.00	0.00	-1721.71	325.32
8.5in Open Hole	8041.11	12943.83	4902.72	7664.00	NA	-1721.71	325.32	NA	NA
5.5in Casing Production	26.00	12927.11	12901.11	26.00	12550.00	0.00	0.00	-1721.71	325.32

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) Twist Canyon Federal 21-1A Target 2500'FSL & 1500'FWL		7878.00	-1721.71	325.32	1553058.00	6792856.69	38°58'03.483"N	111°48'26.042"W	point

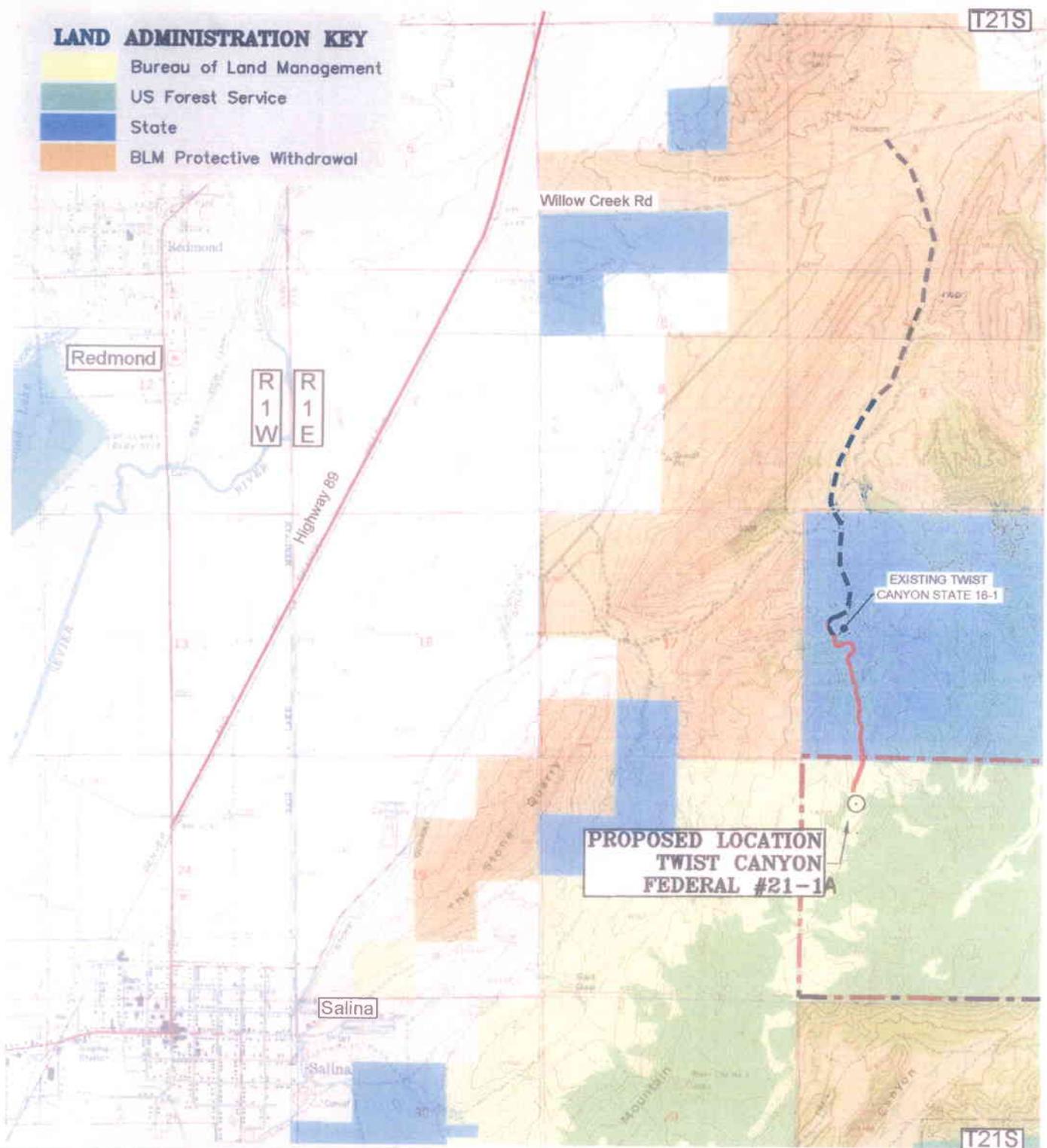
SURVEY PROGRAM

Ref Wellbore: Twist Canyon Federal 21-1A PWB Ref Wellpath: Twist Canyon Federal 21-1A PWP Rev-B.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
5978.00	12927.11	MTC (Collar, post-2000) (Standard)		Twist Canyon Federal 21-1A PWB

LAND ADMINISTRATION KEY

- Bureau of Land Management
- US Forest Service
- State
- BLM Protective Withdrawal



**PROPOSED LOCATION
TWIST CANYON
FEDERAL #21-1A**

EXISTING TWIST
CANYON STATE 18-1

LEGEND

- PROPOSED LOCATION
- EXISTING ROADWAY
- NEW ROADWAY
- LEASE BOUNDARY

Wolverine Twist Canyon Federal #21-1A
Section 21, T.21 S., R.1 E., S.L.B. & M.
910' FNL 1199' FWL

Wolverine Gas & Oil Co of Utah, LLC

Twist Canyon Federal #21-1

Vicinity Map



Jones & DeMille Engineering

1535 South 100 West - Richfield, Utah 84701
 Phone (435) 896-8266 Fax (435) 896-8268
 www.jonesanddemille.com

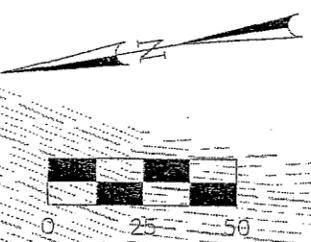
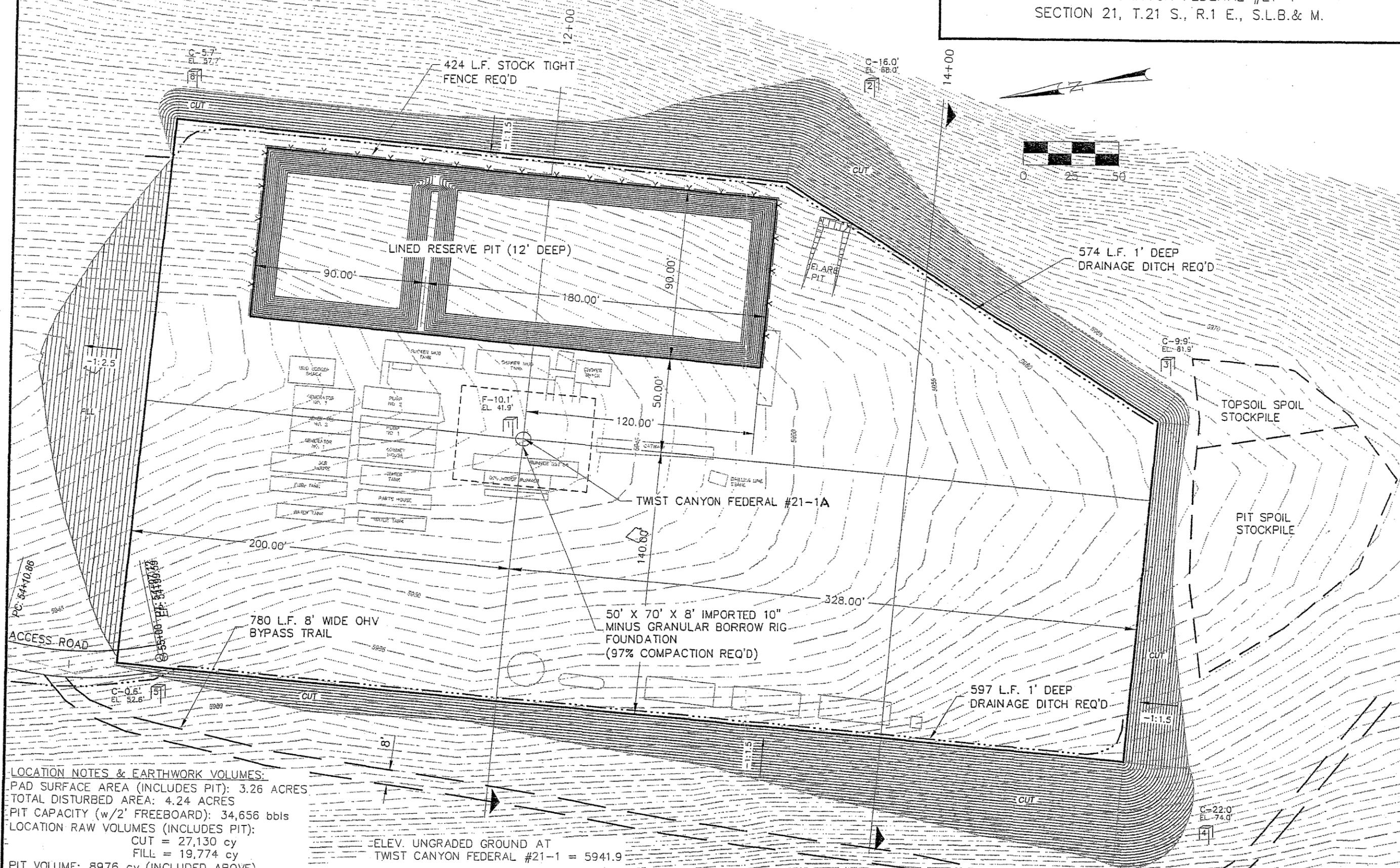


SCALE: 1" = 3000'

DRAWN: L.G. 04-08	PEN TBL: _1stnrd-hp2600.cib	PROJECT: 0802-098	SHEET: 1
CHECK: D.R. 04-08	FILE: VICMAP21-1	LAST UPDATE: 8/28/2008	

WOLVERINE GAS AND OIL COMPANY OF UTAH, LLC.

LOCATION LAYOUT FOR
TWIST CANYON FEDERAL #21-1
SECTION 21, T.21 S., R.1 E., S.L.B. & M.



LOCATION NOTES & EARTHWORK VOLUMES:
 PAD SURFACE AREA (INCLUDES PIT): 3.26 ACRES
 TOTAL DISTURBED AREA: 4.24 ACRES
 PIT CAPACITY (w/2' FREEBOARD): 34,656 bbls
 LOCATION RAW VOLUMES (INCLUDES PIT):
 CUT = 27,130 cy
 FILL = 19,774 cy
 PIT VOLUME: 8976 cy (INCLUDED ABOVE)
 REQ'D PAD FILL (15% SHRINK)=22,740 cy
 NET (TOPSOIL & PIT SPOIL)= 4,390 cy

ELEV. UNGRADED GROUND AT
TWIST CANYON FEDERAL #21-1 = 5941.9
 ELEV. GRADED GROUND (SUBGRADE) AT
TWIST CANYON FEDERAL #3-1 = 5952.0

Jones & DeMille Engineering 1335 South 100 West - Richfield, Utah 84701 Phone (435) 636-6288 Fax (435) 636-6208 www.jonesanddemille.com		DESIGN: L.G. 04-08 DRAWN: L.G. 04-08 CHECKED: D.R. 04-08 REVIEW: BY:
APPROVAL RECORD: DATE: _____ PROJECT DESIGN ENGINEER: _____ DATE: _____	APPROVAL RECORD: DATE: _____ CHECKED: _____ REVIEW: _____	REVISIONS: NO. DATE ORIGINAL SUBMISSION FOR AUTHORIZATION BY: _____ NO. DATE DESIGN REV. BY (CORR. BY AFFECTED) BY: _____ NO. DATE PARCELS REQUESTED BY: _____
Wolverine Gas & Oil Co of Utah, LLC TWIST CANYON FEDERAL #21-1A WELL PAD SITE PLAN PROJECT NUMBER: 0802-098		DWG NAME: 3d_site_21-1p.dwg CREATED: 04/10/2008 SHT SET: TWIST CANYON PEN TBL: _____ SCALE: 1"=50' LAST UPDATE: 8/26/2008
SEVIER COUNTY		

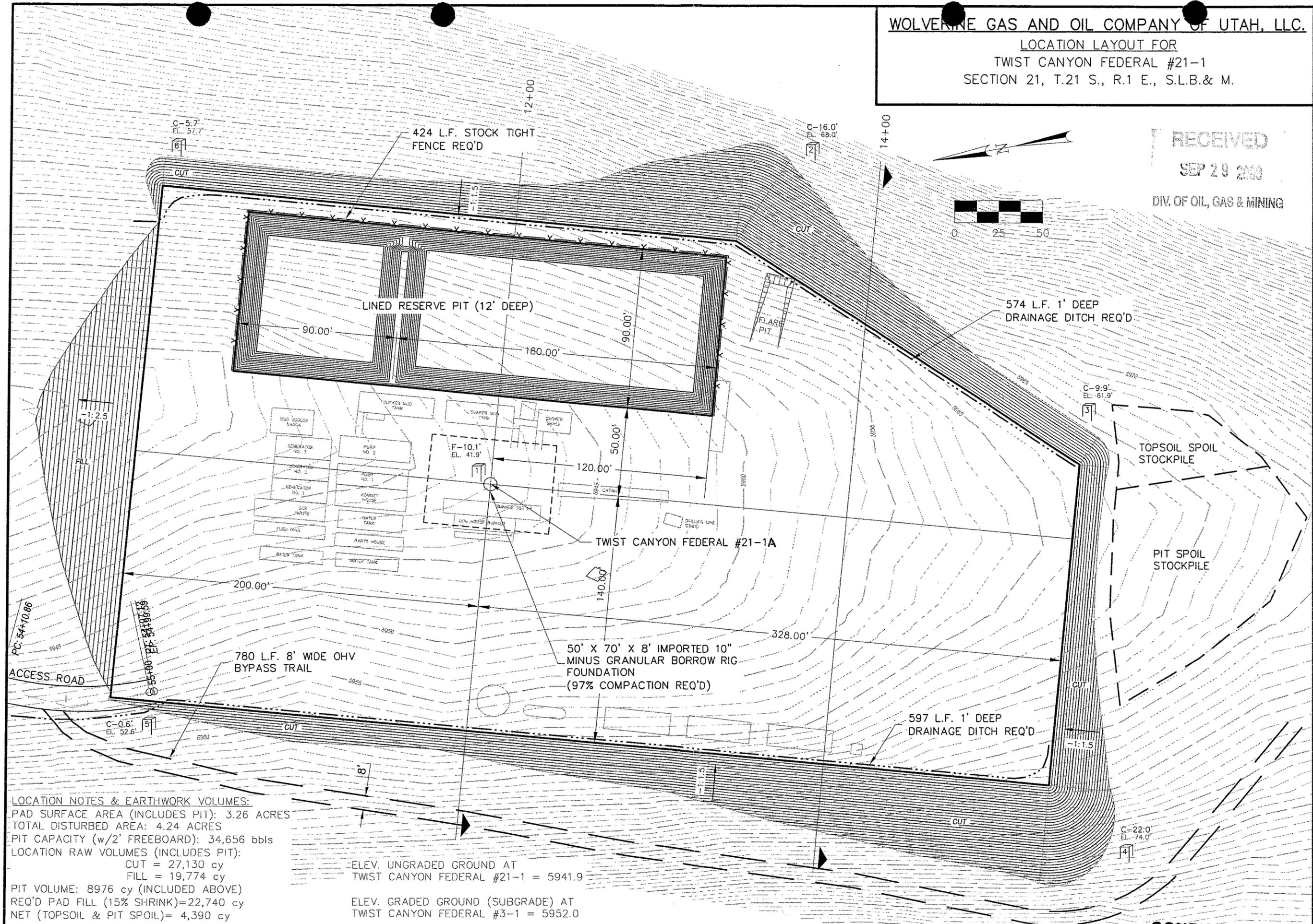
WOLVERINE GAS AND OIL COMPANY OF UTAH, LLC.

LOCATION LAYOUT FOR
TWIST CANYON FEDERAL #21-1
SECTION 21, T.21 S., R.1 E., S.L.B. & M.

RECEIVED

SEP 29 2008

DIV. OF OIL, GAS & MINING



LOCATION NOTES & EARTHWORK VOLUMES:
 PAD SURFACE AREA (INCLUDES PIT): 3.26 ACRES
 TOTAL DISTURBED AREA: 4.24 ACRES
 PIT CAPACITY (w/2' FREEBOARD): 34,656 bbls
 LOCATION RAW VOLUMES (INCLUDES PIT):
 CUT = 27,130 cy
 FILL = 19,774 cy
 PIT VOLUME: 8976 cy (INCLUDED ABOVE)
 REQ'D PAD FILL (15% SHRINK)=22,740 cy
 NET (TOPSOIL & PIT SPOIL)= 4,390 cy

ELEV. UNGRADED GROUND AT
TWIST CANYON FEDERAL #21-1 = 5941.9
 ELEV. GRADED GROUND (SUBGRADE) AT
TWIST CANYON FEDERAL #3-1 = 5952.0

DESIGN: JONES & DEMILLE ENGINEERING		REVISIONS	NO.	DATE	REVISIONS
DRAWN: L.G.		NO.	DATE	REVISIONS	NO.
CHECKED: D.R.		NO.	DATE	REVISIONS	NO.
DATE: 04-08		NO.	DATE	REVISIONS	NO.
PROJECT DESIGN ENGINEER		NO.	DATE	REVISIONS	NO.
DATE: 04-08		NO.	DATE	REVISIONS	NO.
APPROVED:		NO.	DATE	REVISIONS	NO.
DATE:		NO.	DATE	REVISIONS	NO.
PROJECT NUMBER: 0802-098		DWG NAME: 3D SITE 21-1P&DWG CREATED: 04/10/2008			
SHEET NUMBER: SP-01		SHT SET: TWIST CANYON PEN TEL: 1-800-422-8800			
COUNTY: SEVIER		LAST UPDATE: 8/26/2008			
SHEET NO. SP-01		REMARKS			

CONFIDENTIAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
UTU-80587

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Federal Unit

8. Well Name and No.
Twist Canyon Federal 21-1

9. API Well No.
43-041-30058

10. Field and Pool, or Exploratory Area
Exploratory

11. County or Parish, State
Sevier

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Wolverine Gas and Oil Company of Utah, LLC

3a. Address
55 Campau NW, Grand Rapids, MI 49503

3b. Phone No. (include area code)
616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Surface: 1007' FNL, 1173' FWL, Sec 21, T21S, R1E
BHL: 2500' FSL, 1500' FNL, Sec 21, T21S, R1E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input checked="" type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input type="checkbox"/> Other

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The purpose of this sundry is to submit documentation of the abandonment of Twist Canyon Federal 21-1, which had to be abandoned prematurely after drilling to 807' and encountering severe wellbore stability issues in the Black Cap Mountain Formation, a highly unconsolidated volcanoclastic sandstone. After attempting corrective measures, the well was plugged and abandoned, as outlined in the attached narrative.

The rig will be skidded approximately 100' north and a new wellbore drilled under the name Twist Canyon Federal 21-1A. Verbal approval has been granted for this well and a separate sundry will be submitted for this new well.

RECEIVED

SEP 29 2008

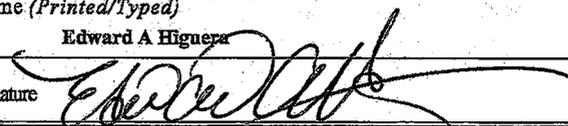
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Edward A Higuera

Title Manager - Development

Signature



Date

09/19/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

CONFIDENTIAL

To: BLM and UDOGM

From: Wolverine Gas and Oil Company of Utah, LLC

Re: Twist Canyon Federal 21-1 (original wellbore)
API No. 43-041-30058
Sundry Notice Narrative 

The purpose of this Sundry is to document the activity at the above-referenced well and to document final abandonment of the well bore. During the drilling of this wellbore, changes had to be made to the original conductor and surface casing program. These changes were communicated previously with Al McKee, BLM and implemented based on his verbal approval. This document also records the actual lengths and dimensions of casing installed in this wellbore.

1. Conductor: Thirty six (36) inch conductor was set at 55' GL after encountering unstable hole at approximately 70. Originally, we had planned to set 24" conductor to 120'. At 70 feet, the rathole drilling could not advance, and after the formation dulled the carbide teeth on the 26-in bucket rig twice, drilling was terminated.
2. 18-5/8 Contingency Casing: Using a 26" hammer bit and drilling with air, we drilled hard, fractured tuff to approximately 439' and then encountered a formation change and drilled loose grains of volcanoclastic sandstone. At approximately 535', hole conditions became unstable and we decided to set 18-5/8, 68 ppf, J-55 BTC contingency string. We ran the 18-5/8 casing to 467' and tagged fill (68' of fill) and washed down to 509 feet with water, but could not get returns. Casing acted like it was rotating on a boulder and we lost four feet, so the decision was made to cement the casing. Cemented bottom casing with 97bbls of 15.8 lb.gal cement. We ran 2-3/8" tubing in the casing annulus and cemented, in four separate attempts, the annulus with 283 barrels (In the annulus between the 26-inch hole and 18-5/8" casing, 283 barrels would fill 880 ft.). The 18-5/8" casing was not part of the originally approved APD.
3. Drilling Surface Hole: Drilled out of 18-5/8 casing with 17-1/2 hammer bit and drilled with air to 807'. The volcanoclastic sand drilled easily, although we experienced partial to no returns at the blooie line. We drilled to 807' and had alternating periods of no circulation and periods of unloading large volumes of sand and baseball sized rocks. We attempted to clean the hole for 10 hours, pumping sweeps and working pipe. On the following bit trip, we encountered sudden drag, but we were able to work through it. Inside the 18-5/8 casing, though, we encountered a tight spot, and it took considerable effort to work the bit through, but we eventually made it to surface.

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SEP 29 2003

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At this point, we conducted an evaluation our hole conditions by running an Expro TC camera into the hole to 496'. The TV pictures indicated an obstruction below the casing as well as some casing damage. We were able to run an 8-3/4" bit and no obstruction was found and continued to run the bit to 561 where some obstruction was found (likely sand fill from cave ins). Corrective measures were evaluated and attempted, but abandonment of this wellbore and skidding the rig and re-drilling the well was determined to be necessary.

4. Well Abandonment: On September 2, the well was plugged by pumping 200 bbls down the 18-5/8" casing followed by 143 cubic yards of ready-mix concrete, which filled the casing to surface (volume of casing is approximately 30 cubic yards). Drilled cement in casing from 41' to 62' with 17-1/2" bit. Layed down bit and BHA and notified BLM of abandonment and preparations were made to skid rig. Final abandonment occurred with by cutting 18-5/8 conductor 3 ft below ground level and filing the 18-5/8" from the existing top of cement to surface with 3.8 cubic yards of concrete. A 0.25" thick steel plate was welded to top of the cut-off 18-5/8" conductor . A weep hole was placed in this plate. Well identification and location data was placed on this plate with a welder. A length of 4" steel pipe was welded on top of the cap. This pipe extends about six inches above ground level at this time (so it won't interfere with drilling operations of the replacement well). After operations are completed on the Twist Canyon 21-1A (replacement well), an additional six feet of 4" steel pipe will be welded to this short length. The well location and identification will be permanently welded on the pipe, as per Onshore Order No. 2. The cellar was filled with native soil.

RECEIVED

SEP 29 2003

DIV. OF OIL, GAS & MINING

CONFIDENTIAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
UTU-80587

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Federal Unit

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
Twist Canyon Federal 21-1A

2. Name of Operator
Wolverine Gas and Oil Company of Utah, LLC

9. API Well No.

3a. Address
55 Campau NW, Grand Rapids, MI 49503

3b. Phone No. (include area code)
616-458-1150

10. Field and Pool, or Exploratory Area
Exploratory

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Surface: 910' FSL, 1199' FWL, Sec 21, T21S, R1E
BHL: 2500' FSL, 1500' FWL, Sec 21, T21S, R1E

11. County or Parish, State
Sevier

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA.

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Replacement Well
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The purpose of this sundry is to provide documentation for the Twist Canyon Federal 21-1A, which is the replacement well to the Twist Canyon Federal 21-1, which was abandoned during drilling operations because of hole problems. The replacement well (Twist Canyon Federal 21-1A) is located on the same surface pad as the original wellbore. The rig as skidded approximately 100 feet north (see attached plat and pad layout). This sundry also documents changes approved verbally, but were different from the original APD.

RECEIVED

SEP 29 2008

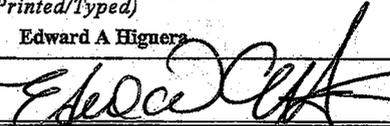
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Edward A Higuera

Title Manager - Development

Signature



Date

09/19/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

CONFIDENTIAL

To: BLM and UGOGM

From: Wolverine Gas and Oil Company of Utah, LLC

Re: Twist Canyon Federal 21-1A (replacement wellbore)
Sundry Notice Narrative

The purpose of this Sundry is to provide documentation for the Twist Canyon 21-1A which is a replacement well for the Twist Canyon 21-1 (API No. 43-041-30058), which was terminated and plugged because of hole conditions. This replacement well is located on the same well pad. The rig was skidded approximately 100' north to the new surface location, which is located on the same pad. Drilling operations have commenced, in accordance with approval granted by Al Mckee, BLM.

1. Location:

New Surface: 910 FSL & 1199 FWL Section 21 T21S R1E, Sevier County Utah

BHL: No Change

2500 FSL & 1500 FWL Section 21 T21S R1E, Sevier County Utah

2. Conductor: 30-in OD Grade B, 157.53 lb/ft, 0.5 inch casing was set at 91' in a 36-inch hole and cemented with 15 yards of concrete. The original APD proposed using 20" conductor in a 24" hole. The larger conductor was needed to accommodate larger surface casing.

3. Surface Casing: Original APD proposed 13-3/8" surface casing set to 2000'. We now propose using new 18-5/8", 87.5 lb/ft, J-55 BTC casing set to approximately 400' KB. This casing will be cemented to surface in one stage. Approval for setting the 18-5/8" casing was granted verbally by Al McKee on September 12, 2008.

4. First Intermediate Hole: After the 18-5/8" casing is cemented, a slip-on 20-3/4", 3000 psi WP casing head will be installed on the 18-5/8" casing. This next section of the well, below the 18-5/8" casing, will be drilled with mud, using 17.5" bits to approximately 100' into the Arapien Shale. The exact depth of the Arapien is unknown, but is projected to come in as shallow at 850'.

The casing to be set into the Arapien section will be the first intermediate casing, and will be a string of 13-3/8", 68 lb/ft, J-55 BTC casing. This casing will be cemented from the 13-3/8" casing shoe to inside the 18-5/8" casing at 400'. We want to set the 13-3/8" casing approximately 100 feet into the Arapien section so we can get the unstable hole behind casing.

After hanging the 13-3/8" casing in the 20-3/4", 3000 psi WP casing head, a 20-3/4", 3000 psi WP bottom flange by 13-5/8" 5000 psi WP top flange spool ("B" Section) will be placed above the 20-3/4" casing head. SST's stack of 13-5/8", 10,000 psi WP BOP stack will be installed above the "B" section. The next section of the well below the 13-3/8" casing will be drilled with mud using 12.25" bits to the Twin Creek formation, as was proposed in the original APD.

No other change is anticipated to the approved APD.

RECEIVED

SEP 23 2011

CONFIDENTIAL

DIV. OF OIL, GAS & MINING

Ed Higuera

From: Ed Higuera
Sent: Thursday, October 02, 2008 4:49 PM
To: 'dianawhitney@utah.gov'
Cc: 'pam_hart@blm.gov'; Al McKee (al_mckee@blm.gov); Helene Bardolph
Subject: Twist Canyon 21-1A

Attachments: Twist Canyon Federal 21-1A Revised APD.PDF



Twist Canyon
Federal 21-1A Rev...

Diana,

I am sending you the APD package for the Twist Canyon 21-1A with this email, as you requested. A hard copy (with color copies) will also be mailed out to you. In the email package, we have included the BLM APD form, well plat, well layout showing new location on the existing pad, vicinity map, revised drilling plan, surface use plan (no change except location reference) and revised directional plan with the new surface hole. I have not included, with this email, a copy of the H2S contingency plan. Nothing has changed from the original H2S plan. I am also sending you a copy of the BLM-approved BLM Form for Twist Canyon 21-1A. You'll note on that form that there was a typo on the footages (we listed "FSL" instead of "FNL") so we provided a new form and struck through the typo on the original that had already been approved and manually wrote the correct reference.

I will send out the hard copy in tomorrow's mail.

If you need anything else, please let me know. Thanks

-----Original Message-----

From: Diana Mason [mailto:dianawhitney@utah.gov]
Sent: Monday, September 29, 2008 2:52 PM
To: Ed Higuera
Subject: Rigskid

Ed,

We require a new APD for a rigskid. Will you send in the additional information for the Twist Canyon Federal 21-1A?

Thank you,
Diana

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RIG SKID

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

5a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-80587
5b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Wolverine Gas & Oil Company of Utah, LLC		7. If Unit or CA Agreement, Name and No. Wolverine Federal Unit
3a. Address 55 Campau NW Grand Rapids, MI 49503-2616		8. Lease Name and Well No. Twist Canyon Federal 21-1A
3b. Phone No. (include area code) 616-458-1150		9. API Well No. 43-041-30061
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 910' FNL, 1199' FWL, Sec 21, T21S, R1E NWNW At proposed prod. zone 2500' FSL, 1500' FWL, Sec 21, T21S, R1E NESW		10. Field and Pool, or Exploratory Exploratory
14. Distance in miles and direction from nearest town or post office* 2.2 miles east-northeast of Salina, Utah		11. Sec., T. R. M. or Blk. and Survey or Area Section 21, T21S, R1E, SLB&M
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1500	16. No. of acres in lease 640	17. Spacing Unit dedicated to this well 40 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. None	19. Proposed Depth 12,900' (12,550'TVD)	20. BLM/BIA Bond No. on file BLM WY3329
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5947' GR	22. Approximate date work will start* 09/12/2008	23. Estimated duration 120 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature	Name (Printed/Typed) Edward A. Higuera	Date 10/02/2008
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Title **Manager - Development**

Approved by (Signature)	Name (Printed/Typed) BRADLEY G. HILL	Date 10-21-08
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Title **Office ENVIRONMENTAL MANAGER**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

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OCT 06 2008

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COPY

Surf

430006X
4313792Y
38972179
- 111.807985

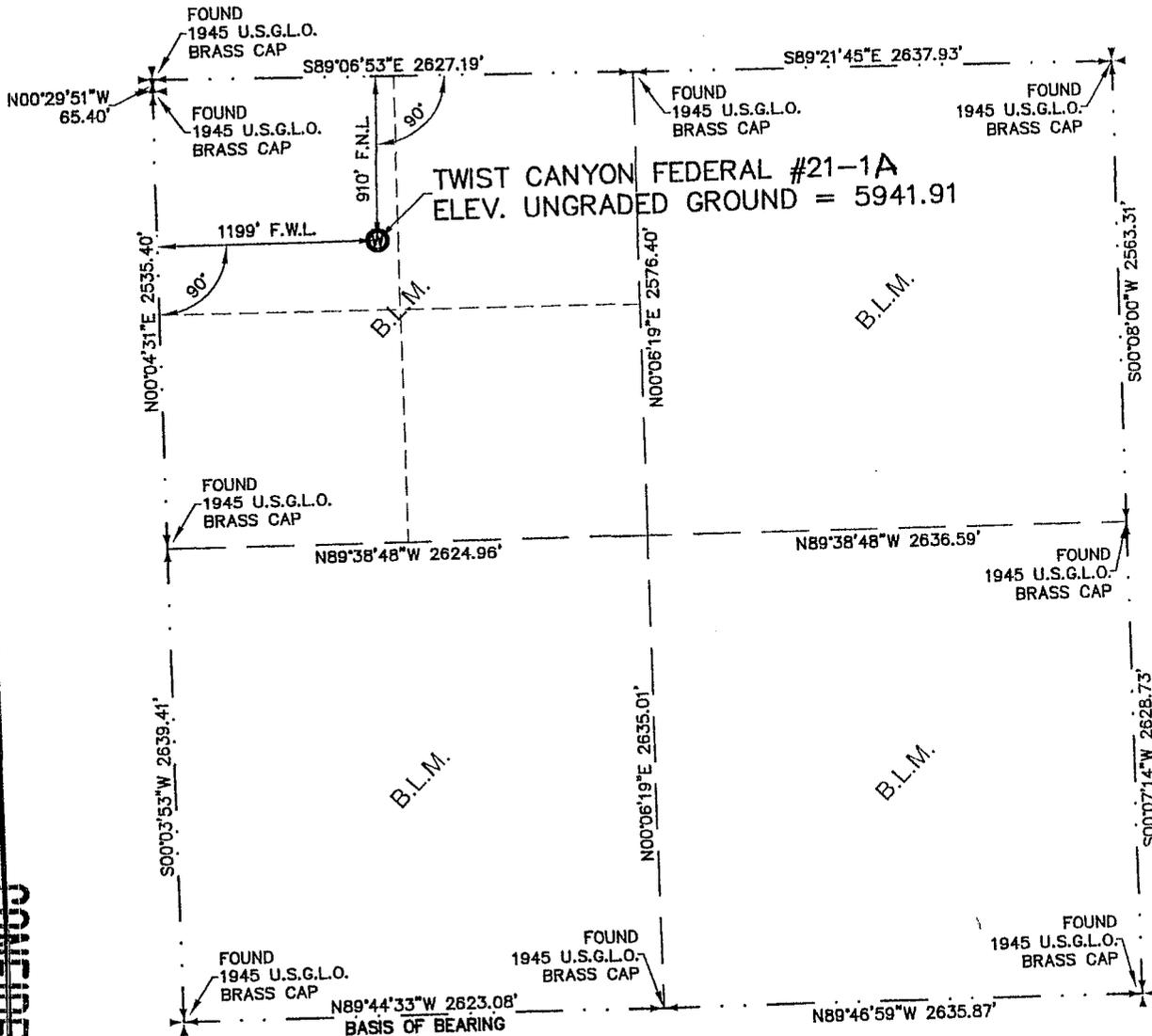
BHL

430104X
4313253Y
38.967331
- 111.806789

Section 21, T.21 S., R.1 E., S.L.B. & M.

PROJECT
Wolverine Gas & Oil Company of Utah, L.L.C.

WELL LOCATION, LOCATED AS SHOWN IN THE N.W. 1/4 OF THE
 N.W. 1/4 OF SECTION 21, T.21 S., R.1 E., S.L.B. & M.
 SEVIER COUNTY, UTAH

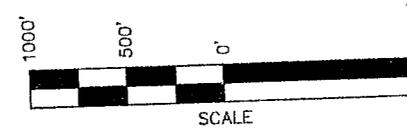


- LEGEND**
- ⊕ = SECTION CORNERS LOCATED
 - ⊖ = QUARTER SECTION CORNERS LOCATED
 - ⊙ = PROPOSED WELL HEAD

NOTE: THE PURPOSE OF THIS SURVEY WAS TO PLAT THE TWIST CANYON FEDERAL #21-1A LOCATION, LOCATED IN THE N.W. 1/4 OF THE N.W. 1/4 OF SECTION 21, T.21 S., R.1 E., S.L.B. & M., SEVIER COUNTY.

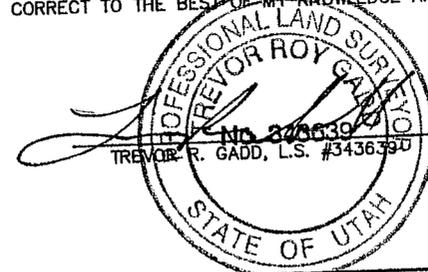
BASIS OF ELEVATION

ELEVATION BASED ON SALINA H.A.R.N. STATION LOCATED IN THE NW 1/4 OF SECTION 19, T.21 S., R.1 E., S.L.B. & M.



CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



08/26/08
 DATE



Jones & DeMille Engineering
 1535 South 100 West - Richfield, Utah 84701
 Phone (435) 896-8266
 Fax (435) 896-8268
 www.jonesanddemille.com

Well Location Plat for

Wolverine Gas & Oil Company of Utah, L.L.C.

DESIGNED	SURVEYED	CHECKED	DRAWN	PROJECT NO.	SHEET NO.
-	T.W.G.	T.R.G.	T.W.G.	0802-098	1
DATE	DWG NAME	SCALE			
8/28/2008	well location	1"=1000'			

BASIS OF BEARINGS

BASIS OF BEARING USED WAS N89°44'33"W BETWEEN THE SOUTHWEST CORNER AND THE SOUTH QUARTER CORNER OF SECTION 21, T.21 S., R.1 E., S.L.B. & M.
 WELL COORDINATES: LATITUDE = 38°58'20.5009" (38.972361361) NAD83 - UTM ZONE 12N NAD27 N- 14152910.856
 LONGITUDE = -111°48'30.1612" (-111.808378111) NAD83 - UTM ZONE 12N NAD27 E- 1410880.347

CONFIDENTIAL



WOLVERINE GAS AND OIL COMPANY
of Utah, LLC

Energy Exploration in Partnership with the Environment

September 22, 2008

Stan Andersen
Fluid Minerals Group, BLM
Richfield Field Office
150 East 900 North
Richfield, Utah 84701

RE: Twist Canyon Federal 21-1 and Twist Canyon Federal 21-1A

Dear Stan:

The enclosed information covers both the Twist Canyon Federal 21-1 and the Twist Canyon Federal 21-1A, which is a replacement wellbore for the Twist Canyon Federal 21-1. Drilling at the Twist Canyon Federal 21-1 had to be terminated at 807' after encountering unstable wellbore conditions. This well was plugged and abandoned. The replacement wellbore is being drilled approximately 97' north of the original wellbore, and is using the same drilling pad and reserve pit. To accomplish this, Wolverine set new conductor and skidded the rig over to the new location. Approval to drill the replacement wellbore was granted by Al McKee of the BLM.

The information enclosed includes:

- 1) Twist Canyon 21-1 Final Sundry covering the abandonment of the well
- 2) Twist Canyon 21-1A Sundry, APD, and new plat for the replacement well

If you have any questions, please contact me.

Sincerely,


Edward A. Higuera
Manager - Development

enclosures

cc: Al McKee, BLM with enclosures
Diana Mason, UDOGM with enclosures

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SEP 29 2008

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SURFACE USE PLAN OF OPERATIONS

For inclusion with Application for Permit to Drill

Name of Operator: Wolverine Gas and Oil Company of Utah, LLC
Address: One Riverfront Plaza, 55 Campau NW
Grand Rapids, Michigan, 49503-2616

Well Location: **Twist Canyon Federal 21-1A**
910' FNL & 1199' FWL, (being in NW/4 NW/4)
Section 21, T21S, R1E, SLB&M
Sevier County, Utah

Access Road Location: Existing lease road to previously drilled Wolverine State Twist Canyon 16-1 crosses BLM land in Sections 4 and 9, and crosses State land in Section 16. Access road to be constructed crosses State land in Section 16 and BLM land in Section 21.

Fee surface use is not required for construction and drilling of the referenced well and access road. State surface use is required for that portion of the access road that crosses Section 16-T21S-R1E. Federal surface use is being requested with the associated Application for Permit to Drill (APD) through the BLM – Richfield Field Office.

The dirt contractor will be provided with an approved copy of the surface use plan of operations and conditions of approval before initiating construction.

A Federal onsite inspection was conducted on Tuesday, May 1st, 2007 with the following individuals present:

Charlie Irons - Wolverine Gas and Oil Company of Utah, LLC
Paul Spiering - Wolverine Gas and Oil Company of Utah, LLC.
Darin Robinson – Jones & DeMille Engineering
Glen Nebeker - Western Land Services – NEPA Specialist
Stan Andersen - BLM Supervisory Natural Resource Specialist
Chris Horting-Jones - BLM Archaeologist
Rod Lee - BLM Environmental Coordinator
Brant Hallows - BLM Range Management Specialist
Pam Hart – BLM Legal Instruments Examiner
Burke Williams – BLM Range Conservationist
Bert Hart - BLM Team Leader

Existing Roads:

The vicinity map in the APD packet shows the proposed well location and its proximity to the town of Salina, Utah (being 3 miles northeast of Salina).

Driving directions: From Salina, Utah, travel north on US 89, under Utah Department of Transportation (UDOT) maintenance approximately 4 miles to Willow Creek Road (a gravel county road), follow easterly about 1.8 miles then turn south onto the lease road (on BLM land) for the previously-drilled Wolverine State Twist Canyon 16-1 well. Follow lease road approximately 1.68 miles to south line of BLM land and onto State land. Continue approximately 0.45 miles to existing well pad for Wolverine State Twist Canyon 16-1 well. The surface conditions of Willow Creek road and the existing lease road are considered adequate to bear rig-related traffic without improvement.

Access Roads to be Constructed and Reconstructed:

Proposed access will require the construction of a new road from the existing 16-1 well pad southerly to the proposed 21-1 well location. An existing ATV trail/road connects the two locations but due to rough terrain,

portions of the present road route from the 16-1 well pad across State land to the BLM lease boundary cannot be used. A switchback road will need to be constructed off the 16-1 well pad to accommodate rig traffic. See road design drawings in APD packet. From the BLM lease boundary (north line of Sec 21-21S-1E) and southerly to the 21-1 well site, the access road will be constructed generally following the existing trail/road. The new constructed road across BLM land will include one vehicle turnout, as shown on the drawings, to allow traffic to pass.

Total length of new constructed access road is 4,522 feet, or 0.86 mile. BLM on-lease road length is about 820 feet, or 0.15 mile. An application for right-of-way is being submitted to the School and Institutional Trust Lands Administration (SITLA) for the state-owned portion of the proposed access road.

Road construction, operation and maintenance will be in compliance with the terms and conditions of the Conditions of Approval, the American Association of State Highway and Transportation (AASHTO) safety standards, and will meet criteria for the Manual of Uniform Traffic Control Devices (MUTCD) manual for signs.

Energy dissipating structures and silt fences will be utilized to minimize erosion that may result from the road construction.

The Operator intends to install a gate across the lease road at the point where construction begins (near the edge of the 16-1 well pad) to restrict traffic to the proposed well. An ATV guard would be installed adjacent to the gate so that ATV traffic will have continued access by use of the lease road. These installations would be subject to SITLA approval. An area around one side of the 21-1 well pad would be left passable by ATV traffic so that public land in Section 21 will remain accessible by this route.

All existing county roads, realigned roads and the new lease road will be maintained and kept in good repair during all phases of operation. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

Location of Existing Wells within a one-mile radius:

Well	Type/status	Surface Location	Bottom Hole Location
Wolverine State Twist Canyon 16-1	Dry/ Suspended	SW4NW4 Section 16	SW4SE4 Section 16

Location of Existing and/or Proposed Facilities if Well is Productive:

(a) *On well pad* – A temporary testing facility may be constructed on this location in the event drilling is successful, consisting of treater/separator, tanks and related components. The facility would be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves would be located inside the berm surrounding the tank battery.

(b) *Off well pad* – It is not possible to know whether an off-well pad production facility would be necessary in the event of a discovery. In the event such a facility is needed, the existing well pad for the 16-1 well would potentially be used for collection, treating and load-out. The Operator will submit this information for approval at such time as production requirements are known.

Location and Type of Water Supply (Rivers, Creeks, Lakes, Ponds and Wells):

The Operator intends to purchase water for drilling purposes from the City of Salina, under contract for sale dated 9/27/2007. Water will be loaded from a hydrant north of Pioneer Cemetery on Slaughterhouse Road in the SE4NW4 Section 19-T21S-R1E, and transported by tankers to the location, using county roads and the approved lease roads. Should additional water sources be pursued they will be properly permitted through the State of Utah – Division of Water Rights. The BLM will be notified of any changes in water supply.

Construction Materials:

Natural earth materials used for fill on the well pad will be taken from cuts made in construction of the pad. Imported granular borrow from an approved source will be applied to the surface of the well pad and access road where deemed necessary. No construction materials will be removed from federal lands.

Methods for Handling Waste Disposal:

The reserve pit will be used for the disposal of waste mud and drill cuttings. All borehole fluids and salts will be contained in the reserve pit. It will be located in cut material and will be lined with 12 mil minimum thickness plastic nylon reinforced liner material. The liner will overlay a felt liner pad only if sharp rock edges result from excavation. The pit liner will overlap the top of the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc. that could puncture the liner will be disposed of in the pit. Pit walls will be sloped no greater than 2:1. A minimum 2-foot freeboard will be maintained in the pit at all times during the drilling and completion operations. After evaporation of fluids, back-fill of sub-soil and compaction to prevent settling will

occur within 90 days of cessation of pit use. If necessary, any remaining fluids will be pumped out of the pit and transported off site.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.

Wastewater will not be discharged on the surface at this site and the drilling of the well will not require a wastewater management plan.

All rubbish and debris will be kept in containers on the well site, and will be hauled to an approved disposal site upon completion of drilling operations and as needed during such operations. There will be no chemical disposal of any type.

Self-contained, portable toilets will be used for human waste, and the waste will be disposed at an approved human waste disposal facility. Sanitation will comply with local and state regulations.

Ancillary Facilities:

No ancillary facilities are anticipated at this time.

Well Site Layout:

Pad Location and Layout Drawings in the APD packet show the proposed well site layout including location of the reserve pit and access road onto the pad, turnaround areas, parking areas, living facilities, soil material stockpiles, and the orientation of the rig with respect to the pad and other facilities. Cross section sheets said packet show cuts and fills required for construction, and their relationship to topography. As detailed above under Methods for Handling Waste Disposal, the reserve pit will be lined and appropriate measures as described above will be taken to prevent leakage. The pit will be fenced on three sides during drilling operations and then the fourth side will be immediately fenced when the rig is moved off location.

The pad and road designs would be consistent with BLM specifications.

A pre-construction meeting with responsible company representative and contractors will be conducted at the project site prior to commencement of surface-disturbing activities. The pad and road will be construction-staked (centerline and exterior boundaries) prior to this meeting.

All surface disturbing activities will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of approval from the BLM under the APD, and terms and conditions of approval from SITLA under the right-of-way grant for the portion of the access road across State land.

All cut and fill slopes will be such that stability can be maintained for the life of the activity.

The stockpiled topsoil (first 6 inches or maximum available) will be isolated in a berm by the well pad. Topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination.

Water spraying may be implemented if necessary to minimize dust.

Plans for Reclamation of the Surface:

Interim Reclamation: In the event production is achieved the Operator will perform interim reclamation of the site. Interim reclamation will consist of reclamation of the reserve pit and reclamation of that portion of the well pad not needed for ongoing operations. After evaporation of fluids, the pit will be back-filled with sub-soil and/or rock and compacted to prevent settling. The pit area will be surfaced with granular borrow to render it a usable part of the well pad. All portions of the pad no longer necessary for well workover, testing or treating will be contoured to match the surrounding terrain to the best extent practicable. Stockpiled topsoil will be evenly distributed thereon, scarified and seeded as per BLM conditions of approval.

Final Reclamation: In the event the well is a dry hole, or at such time that all production ceases and the well has been plugged and abandoned, the Operator will perform final reclamation of the site. Final reclamation will consist of reclamation of the reserve pit, the well pad and the access road as it crosses BLM land.

Any accumulation of hydrocarbons in the reserve pit will be removed and recovered for sale unless it is determined by the authorized officer to be waste oil. All waste oil will be disposed of properly at approved facilities. The portion of the reserve pit liner which is exposed above the cuttings will be cut and removed from the site and

disposed in an authorized landfill. After evaporation of fluids, the pit will be back-filled with subsoil and/or rock from the reserve pit stockpile and compacted to prevent settling.

Road base material used in the construction of the access road and pad will be removed from the site and disposed in a proper manner. If the reserve pit has adequate capacity, then some or all of the road base material may be buried in the reserve pit, provided that the granular is not contaminated by oil or other waste materials. The access road will be contoured using an excavator or similar equipment, rather than simply ripping the surface. The path of the ATV trail that existed prior to new-road construction will be left in a condition passable to ATV traffic.

Subsoil from the portions of the well pad that are fill will be pulled up onto the pad in order to reestablish the original slope to the best extent possible. The portions that are cut will be filled to match the original slope of the land to the best extent possible. Topsoil from the stockpile will then be evenly distributed over the entire impacted area, including the new-construction portion of the access road. The entire impacted area will be scarified and seeded in late fall, using the seed mix and methods described in BLM conditions of approval. Final reclamation will take place within 180 days after plugging date of the last well on site, depending on weather, season and other extenuating circumstances.

During the life of the project and until the site is released from liability for reclamation, the project will be inspected at least annually for noxious weeds. If invasive noxious weeds are found, the weeds will be treated to eliminate further reproduction, and treatment shall continue until the weeds have been eradicated. If noxious weeds are found, the BLM will be notified of their occurrence.

Surface Ownership:

The surface of the proposed well site and the southerly 820+/- of the access road is federally owned and is administered by the Bureau of Land Management, United States Department of Interior. The access road across Section 16-T21S-R1E is owned by the State of Utah and is administered by the School and Institutional Trust Lands Administration (SITLA). The previously built portion of the access road in Sections 4 and 9 is federally owned and is administered by the Bureau of Land Management, United States Department of Interior.

Other Information:

The top 6 inches of soil material will be stripped and removed from the new-construction portion of the access road and well pad and stockpiled for future reclamation of the site. This topsoil shall be stockpiled separately from any other excavated materials. It will be reserved for reclamation and not utilized for any other purpose. If it is stockpiled for more than one year it will be seeded with a seed mix approved by the authorized officer.

Heavy equipment used to construct and rehabilitate the well pad and access road will be cleaned and/or sprayed to remove any noxious or invasive weeds and seeds, prior to entering to the project site. Any other equipment and vehicles that have been used in other locations where noxious weeds or seeds could have attached to the equipment will also be sprayed and/or cleaned.

All equipment and vehicles will be confined to the access road and well pad.

Western Land Services will conduct a Class III archeological survey and will submit same under separate cover to the appropriate agencies.

Western Land Services will conduct a T&E survey and prepare an EA for the proposed well site. The T&E report and EA will be submitted under separate cover to the appropriate agencies.

No stream alteration or drainage crossings are involved that require additional State or Federal approval.

All permanent structures, including pumping units, constructed or installed will be painted a flat, non-reflective color as described on page 40 of the Gold Book (Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, 4th Edition 2006). Permanent structures are defined as being on location for six months or longer. Facilities that are required to comply with Occupational Safety and Health Act (OSHA) shall be excluded.

Fire suppression equipment will be available to suppress any wildfires caused by construction or related activities. In the event of a wildfire the Sevier County Fire Warden will be notified.

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I, or someone under my direct supervision, have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 2 day of ^{October} ~~May~~, 2008.

Signature:



Edward Higuera

Position Title: Manager—Development

Address: Wolverine Gas and Oil Company of Utah, LLC
One Riverfront Plaza, 55 Campau NW
Grand Rapids, Michigan, 49503-2616

Telephone: 616-458-1150

Field representative (if not above signatory)

Address: Paul Spiering
1140 N Centennial Park Drive
Richfield, Utah 84701

Telephone: 435-896-1943

Agents not directly employed by the operator must submit a letter from the operator authorizing that agent to act or file this application on their behalf.

WOLVERINE GAS AND OIL COMPANY OF UTAH, LLC

DRILLING PLAN

Twist Canyon Federal 21-1A NW/4 NW/4 Section 21, Township 21 South, Range 1 East, S.L.B.&M. Sevier County, Utah

Note: This Plan covers the replacement well for the Twist Canyon Federal 21-1, which had to be terminated and plugged because of hole stability problems. Twist Canyon Federal 21-1A is the replacement well and will be drilled from the same pad site approximately 97 feet north of the original wellbore. This plan is based on the original plan with changes to surface location and casing/cementing program. No other changes were made.

Plan Summary:

It is planned to drill this confidential exploratory well as a directional bore hole due to surface topography constraints and in accordance with the enclosed directional drilling plan. The well will be drilled to a depth of 12,900' to test the Twin Creek, Navajo, Sinbad and Kaibab formations. Well path deviation caused by subsurface geologic irregularities is expected to be the primary drilling concern in this area. No abnormal pressure is anticipated. The presence of Hydrogen Sulfide gas is anticipated in the Kaibab Formation and deeper, and an H₂S contingency plan to be in effect before drilling below the Shnabkaib at +/-10,700' compliments this drilling plan.

The planned location is as follows:

Surface Hole Location: 910' FNL, 1199' FWL, Section 21, T21S, R1E, S.L.B. & M.

Bottom Hole Location: 2500' FSL, 1500' FWL, Section 21, T21S, R1E, S.L.B. & M.

Conductor casing was set at approximately 91 feet and cemented to surface. A 26" hole was drilled to 399' where 18-5/8" surface casing was set and cemented to surface. A 17-1/2" hole will be drilled to approximately 1150' where 13-3/8" first intermediate casing will be set and cemented. A 12-1/4" hole will be drilled to the Twin Creek to approximately 8061' where the well could be logged and 9-5/8" casing will be set and cemented. Then, an 8-1/2" hole will be drilled to 12,900'. The well will be logged and if significant porosity and hydrocarbon shows are encountered in the Navajo, Sinbad, Kaibab or other formations, then 5-1/2" production casing will be set and cemented at TD.

Drilling activities at this well are expected to commence as soon as rig is ready to spud.

Well Name: Twist Canyon Federal 21-1A
Surface Location: 910' FNL, 1199' FWL NW/4 NW/4 Section 21, T21S, R01E, S.L.B. & M. Sevier County, Utah
TD Bottom-Hole Location: 2500' FSL, 1500' FWL NE/4 SW/4 Section 21, T21S, R01E, S.L.B. & M. Sevier County, Utah
Elevations: 5952' (Est. graded ground) 5979' (Est. KB)

I. Geology:

Tops of important geologic markers and anticipated water, oil, gas, and mineral content are as follows:

<u>Formation</u>	<u>TVD Interval (KB)</u>	<u>MD Interval (KB)</u>	<u>Contents</u>	<u>Pressure Gradient</u>
Volcanics	26' - 1022'	26' - 1022'		
Arapien	1022' - 7574'	1022' - 7908'		
Twin Creek	7574' - 7878'	7908' - 8212'	O/G/W	0.44 psi/ft
Navajo	7878' - 7917'	8212' - 8251'	O/G/W	0.44 psi/ft
T HGRZ	7917' - 7960'	8251' - 8294'		
B HGRZ	7960' - 8895'	8294' - 9229'		
Kayenta	8895' - 9031'	9229' - 9365'		
Wingate	9031' - 9389'	9365' - 9723'		
Chinle	9389' - 9849'	9723' - 10183'		
Shinarump	9849' - 9936'	10183' - 10270'		
Moenkopi	9936' - 10633'	10270' - 10967'		
Shnabkaib	10633' - 10702'	10967' - 11036'		
M Moenkopi	10702' - 10997'	11036' - 11331'		
Sinbad	10997' - 11051'	11331' - 11385'	O/G/W	0.44 psi/ft
L Moenkopi	11051' - 11301'	11385' - 11635'		
Black Dragon	11301' - 11483'	11635' - 11817'		
Kaibab	11483' - 11567'	11817' - 11901'	O/G/W	0.44 psi/ft
Toroweap	11567' - 12550'	11901' - 12884'		
Total Depth	12550'	12900'		

II. Well Control:

The contracted drilling rig has a 10M BOP system but conditions only require a 5M BOP system. BOPE will be in place and tested as a 5M system prior to drilling out the surface casing shoe. See attached schematic of BOPE.

A. The BOPE will as a minimum include the following:

Wellhead Equipment (5M Min.):

<u>BOPE Item</u>	<u>Flange Size and Rating</u>
Annular Preventer	13-5/8" 5M
Double Rams (5" Pipe - top, Blind - bottom)	13-5/8" 10M
Drilling Spool w/ 2 side outlets (4" Choke Line, 4" Kill Line)	13-5/8" 10M x 13-5/8" 10M
Single Ram (Pipe)	13-5/8" 10M
Spacer Spool	13-5/8" 10M x 13-5/8" 10M
Casing Spool (Multi-Bowl)	13-5/8" 10M x 13-5/8" 5M
Casing Head (13-5/8" SOW, w/ two 2-1/16" SSO's)	13-5/8" 5M

Auxiliary Equipment (5M minimum):

<u>BOPE Item</u>
Choke Line with 2 valves (3" minimum)

Kill Line with 2 valves and one check valve (2" minimum)
2 Chokes with one remotely controlled at a location readily accessible to the driller
Upper and lower kelly cock valves with handles
Safety Valves to fit all drill string connections in use
Inside BOP or float sub
Pressure gauge on choke manifold
Fill-up line above the uppermost preventer
Wear bushing in casing head

- A. **Choke manifold** will be functionally equipped and sized at a minimum as shown on the attached diagram. All chokes will be straight lines, or use tee blocks or be targeted with running tees if there are turns, and all choke lines will be anchored. All valves (except chokes) in the kill line choke manifold and choke line will be full opening and allow straight through flow.
- B. **System accumulator** will have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer (3 ram system will have added 50 percent safety factor to compensate for any fluid loss in the control system or preventers) and retain a minimum pressure of 200 psi above pre-charge on the closing manifold without use of the closing unit pumps. The fluid reservoir capacity shall be double the usable fluid volume of the accumulator system capacity and the fluid level of the reservoir shall be maintained at the manufacturer's recommendations. The accumulator will have two (2) independent power sources available to close the preventers. Nitrogen bottles may be one of those sources, and if so, will have charge maintained per manufacturer's specifications.
- C. **Accumulator pre-charge pressure test** will be conducted prior to connecting the closing unit to the BOP stack and at least once every 6 months. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum specified limits. Only nitrogen gas will be used to precharge.
- D. **Power for the closing unit pumps** will be available to the unit at all times so that the pumps will automatically start when the closing valve manifold pressure has decreased to the pre-set level.
- E. **Accumulator pump capacity** will be such that, with the accumulator system isolated from service, the pumps will be capable of opening the hydraulically-operated gate valve (if so equipped), plus closing the annular preventer on the smallest size drill pipe to be used within 2 minutes, and retaining a minimum of 200 psi above the specified accumulator pre-charge pressure.
- F. **Locking devices**, either manual (i.e., hand wheels) or automatic, will be installed on the ram type preventers. A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.
- G. **Remote controls** will be readily accessible to the driller and will be capable of both opening and closing all preventers. Master controls shall be at the accumulator and shall be capable of opening and closing all preventers and the choke line valve.
- H. **Well control equipment testing** will be performed using clear water when the equipment is initially installed, whenever any seal subject to test pressure is broken, following related repairs, and as a minimum, every 30-day interval. The tests will apply to all related well control equipment.

Ram type preventers and associated equipment will be isolated and tested to 5000 psi. The annular preventer will be tested to 2500 psi. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer, for all tests. A casing head valve will be open below the test plug during testing of the BOP stack. Valves will be tested from the working pressure side with all down-stream valves open. Kill line valves will be tested with the check valve held open or the ball removed.

Pipe and blind rams will be activated each trip, but not more than once a day. The annular preventers will be functionally operated at least weekly. A pit level drill will be conducted weekly for each crew. All BOPE drills and tests will be recorded in the IADC driller's log.

III. Casing and Cementing:

A. Casing Program (all new casing):

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Connecti on</u>	<u>Coupling Diameter</u>	<u>Setting Depth</u>
36"	30"	157	Conductor			0' - 91' GL
26"	18.625"	87.5	J-55	BTC	19.625	0-400' KB
17.50"	13.375"	68.0	J-55	BTC	14.375"	0' - 1150' KB
12.25"	9.625"	53.5	T-95	SLX	10.625"	0' - 6000' KB
12.25"	9.625"	53.5	Mav99/P110	LTC	10.625"	6000' - 8061' KB
8.5"	5.500"	23.0	TN-80S	MS Tenaris	6.050"	0' - 12,900' KB

	Surface	1st Intermediate.	2nd Intermediate	Production
Casing O. D. (in)	18.625	13.375	9.625	5.500
Casing Grade	J-55	J-55	T-95 & Mav. 95/P110	TN-80S
Weight of Pipe (lbs/ft)	87.5	68.0	53.5	20.0
Connection	BTC	BTC	SLX & LTC	MS Tenaris
Top Setting Depth - MD (ft)	0	0	0	0
Top Setting Depth - TVD (ft)	0	0	0	0
Bottom Setting Depth - MD (ft)	400	1150	8100	12900
Bottom Setting Depth - TVD (ft)	400	1150	7722	12550
Maximum Mud Weight - Inside (ppg)	9.0	9.0	10.6	9.0
Maximum Mud Weight - Outside (ppg)	9.0	9.0	10.6	9.0
Design Cement Top - TVD (ft)	0	0	1150	7400
Design Cement Top - MD (ft)	0	0	1150	7800
Max. Hydrostatic Inside w/ Dry Outside (psi)	188	538	4256	5873
Casing Burst Rating (psi)	2250	3450	9410	10,560
Burst Safety Factor (1.10 Minimum)	11.9	6.41	1.61	1.79
Max. Hydrostatic Outside w/ Dry Inside (psi)	188	538	4256	5873
Collapse Rating	630	1950	8850	11,160
Collapse Safety Factor (1.125 Minimum)	3.13	3.62	1.59	1.90
Casing Weight in Air 1000 lbs	35	78.2	431	297
Body Yield 1000 lbs	1367	1069	1477	530
Joint Strength 1000 lbs	1329	1140	1146	530
Tension Safety Factor (1.70 Minimum)	39	13.7	2.66	1.78

Casing with same or greater burst, collapse, and tension rating may be substituted for any of the planned casing sizes depending on availability and actual conditions.

B. Cementing Program

<u>Casing Size</u>	<u>Cement Slurry</u>	<u>Quantity (sks)</u>	<u>Density (ppg)</u>	<u>Yield (ft³/sk)</u>
18.625	Lead: Vericem	195	11	3.58
	Tail: Premium Cement	345	15.8	1.17
13.375"	Lead: Vericem	175	10.5	4.41
	Tail: Premium	435	15.6	1.29
9.625"	1 st Stage: 50/50 Poz	1200	14.35	1.264
	2 nd Stage Lead: Varicem	230	10.5	4.28
	Tail: Premium	580	15.6	1.354
5.500"	50:50 POZ Premium AG w/20% silica, retarder	725	13.5	1.651

Surface: 18-5/8" surface casing will be cemented from setting depth (400') to surface and topped out with premium cement if necessary. Hardware will include a Davis-Lynch double valve, down jet, tag in float shoe – Type 501 DVT-BTC threads, and a minimum of one centralizer per joint on the bottom three (3) casing joints. Water or other preflush fluid pumped ahead of the slurry will separate cement from the drilling fluids.

First Intermediate: 13-3/8" surface casing will be cemented from setting depth (1150') to surface and topped out with premium cement if necessary. Hardware will include a guide shoe, float collar, top plug, and a minimum of one centralizer per joint on the bottom three (3) casing joints. Water or other preflush fluid pumped ahead of the slurry will separate cement from the drilling fluids.

Second Intermediate: 9-5/8" intermediate casing will be cemented from setting depth (8100') to 600' (into the 13-3/8" casing shoe at 1150'). Slurry volume will be based on calipered hole size plus a minimum of 25% excess. Hardware will include a guide shoe, float collar, top plug, and centralizers on bottom. The cement will be pumped in two stages bring required cement column to 650'. Water and preflush fluid pumped ahead of the slurry will separate cement from the drilling fluids.

Drilling liner: none planned

Production: 5-1/2" production casing may then be run and cemented in from setting depth of 12,900' to 7600' (into the 9-5/8" casing shoe at 8,100'). A minimum of 20 percent silica will be added to the cement slurry if bottom-hole temperature exceeds 230 °F. Slurry volume will be based on calipered hole size plus 20% excess. Hardware will include a guide shoe, float collar, top plug, and centralizers as needed across any pay zones. Water and preflush fluid pumped ahead of the slurry will separate cement from the drilling fluids.

Other: - The BLM will be notified at least twenty-four hours prior to running and cementing the surface and production casing strings.

Actual cement slurries for all casing will be based on final service company recommendations.

The size, weight, grade, type of thread, number of joints, and footage of all casing run will be recorded in the driller's log. The amount and type of all cement pumped will be recorded in the driller's log.

Adequate time will be allowed before drilling out for the cement at the casing shoe to achieve a minimum 500-psi compressive strength.

All casing strings will be tested to minimum required before drilling out and if pressure declines by more than 10 percent in 30 minutes, corrective action will be taken.

Before drilling more than 20 feet of new hole below each casing string, a pressure integrity test of the casing shoe will be performed to a minimum of the mud weight equivalent anticipated to control the pore pressure to the next casing depth or at total depth of the well.

IV. Mud Program:

<u>Depth</u>	<u>Mud Weight (ppg)</u>	<u>Mud Type</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0 – 1150'	8.4 – 9.4	Fresh Water	26 - 40	N/C to 20 cc
1150' – 8100'	10.0 - 10.5	Salt Mud	32 - 50	N/C to 10 cc
8100' – 12900'	9.2 – 9.5	LSND Polymer	35 - 45	8 – 10 cc

- A. After mudding up, slow pump rates will be taken daily and recorded in the driller's log.
- B. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume.
- C. Abnormal pressures are not anticipated. In the event such pressures are to be anticipated, electronic/mechanical mud monitoring equipment will be in place and include as a minimum; pit volume totalizer (PVT); stroke counter; and flow sensor.
- D. A mud test will be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtrate, and pH.
- E. The 10M BOPE system is not required for conditions on this well and use of the trip tank is not anticipated.
- F. Gas detecting equipment will be installed in the mud return system, and hydrocarbon gas shall be monitored for pore pressure changes. The presence of Hydrogen Sulfide gas may be encountered and an H2S contingency plan is included here.
- G. The need to vent combustible or noncombustible gas is not expected. If needed, a flare system designed to gather and burn all gas will be available. The flare line discharge will be located more than 100 feet from the well head and it will be positioned downwind of the prevailing wind direction. The flare line will have straight lines unless turns are targeted with running tees and it will be anchored. The flare system will have an effective method for ignition.
- H. Abnormal pressure is not expected. If abnormal pressure is to be anticipated, a mud-gas separator (gas buster) will be installed and operable beginning at a point at least 500 feet above any anticipated hydrocarbon zone of interest.

V. Evaluation:

- A. Mud Log: A mud logging unit will be in operation from spud to TD. Samples will be caught, cleaned, bagged, and marked as required.
- B. Drill Stem Tests: No DST's are expected.
- C. Coring: No whole coring is planned. Rotary side-wall cores may be taken at select intervals in conjunction with open-hole logging operations.
- D. Wireline Logs: Wireline logs will be run as hole conditions allow from total depth to surface casing to assist in determining lithology and potential for hydrocarbon recovery. The logging tools will at a minimum survey resistivity, gamma radiation, and sonic velocity.

VI. Expected Bottom-Hole Pressure and Abnormal Conditions:

- A. Hydrogen Sulfide: Hydrogen Sulfide (H₂S) gas may exist in the geologic formations to be penetrated by this well, and the H2S contingency plan will be in effect below 10,700'.

- B. Pressure: No abnormally pressured zones are expected in this well. The pressure gradient for all potentially productive formations is expected to be approximately 0.44 psi/ft.
- C. Temperature: No abnormally high temperatures are expected. Bottom-hole temperature is expected to be approximately 270 °F.

end



Wolverine Gas & Oil Corporation

Energy Exploration in Partnership with the Environment

TRANSMITTAL

To: Diana Mason

Ref#: 10-3-08

Date: 10-3-08

Attn:

ShippedVia: UPS – next day

Shipped By: Edward A. Higuera
Helene Bardolph

DESCRIPTION OF DATA

Enclosed: APD Package for the Twist Canyon Federal 21-1A
(see attached copy of email dated 10-2-08)

Please call if you have any questions or concerns.

Helene Bardolph
Wolverine Gas and Oil Corp.
616-458-1150 x1136

RECEIVED

OCT 06 2008

DIV. OF OIL, GAS & MINING



Wolverine Gas & Oil Corporation

Energy Exploration in Partnership with the Environment

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To: Diana Mason

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**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 10/06/2008

API NO. ASSIGNED: 43-041-30061

WELL NAME: TWIST CYN FED 21-1A(RIGSKID)
 OPERATOR: WOLVERINE GAS & OIL CO (N1655)
 CONTACT: EDWARD HIGUERA

PHONE NUMBER: 616-458-1150

PROPOSED LOCATION:

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

NWNW 21 210S 010E
 SURFACE: 0910 FNL 1199 FWL
 BOTTOM: 2500 FSL 1500 FWL
 COUNTY: SEVIER
 LATITUDE: 38.97218 LONGITUDE: -111.8080
 UTM SURF EASTINGS: 430006 NORTHINGS: 4313792
 FIELD NAME: WILDCAT (1)

LEASE TYPE: 1 - Federal
 LEASE NUMBER: UTU-80587
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: TORWP
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]
(No. WY3329)
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit
(No. MUNICIPAL)
- RDCC Review (Y/N)
(Date: _____)
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- _____ R649-2-3.
- Unit: WOLVERINE
- _____ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
- _____ R649-3-3. Exception
- _____ Drilling Unit
Board Cause No: _____
Eff Date: _____
Siting: _____
- _____ R649-3-11. Directional Drill

COMMENTS: _____

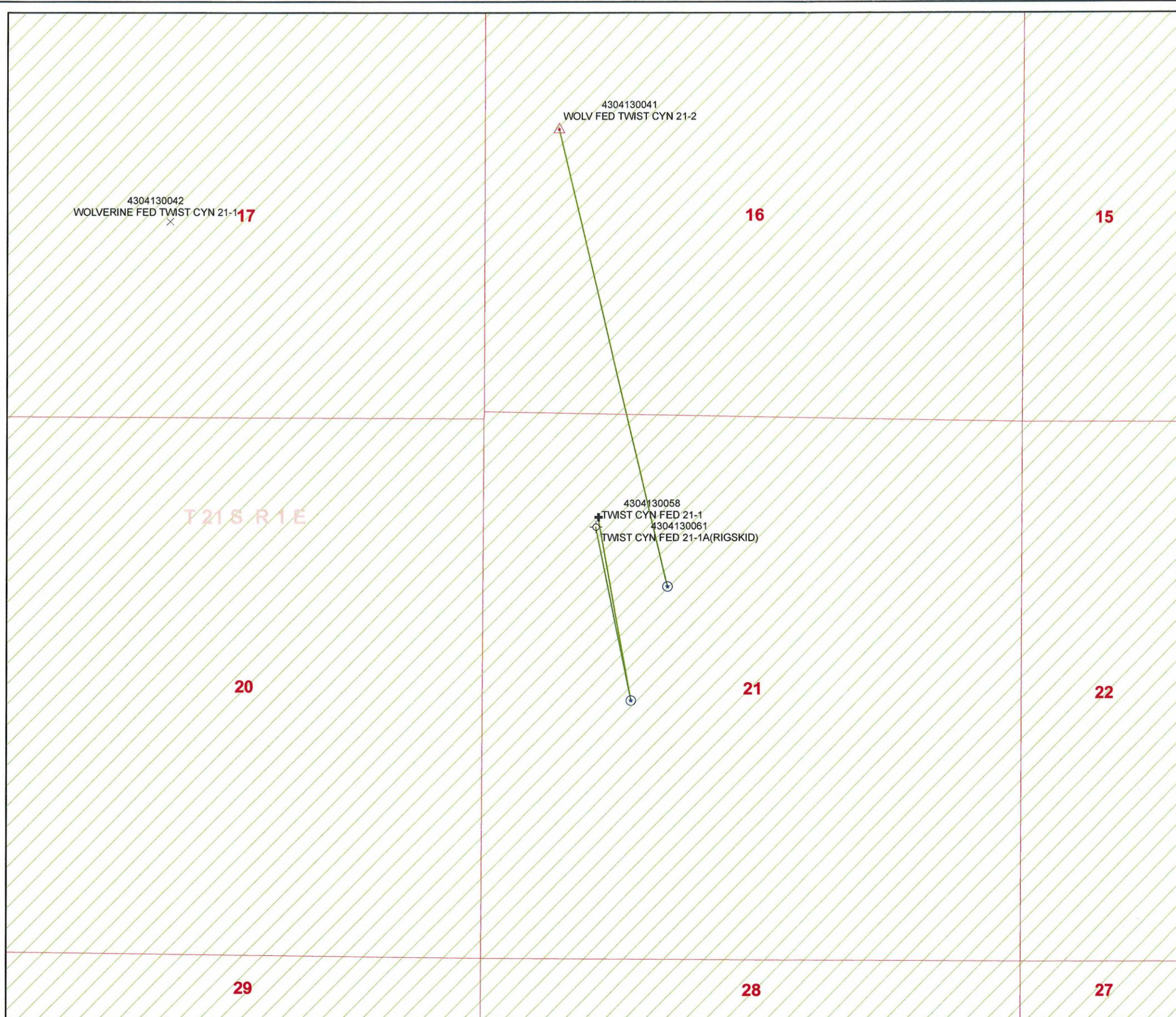
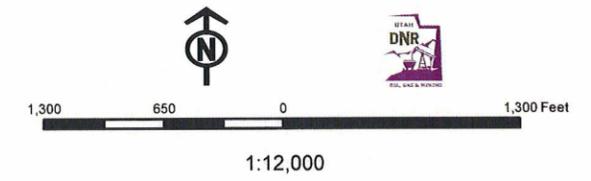
STIPULATIONS: _____

1- Federal Approval
2- Spacing Slip

API Number: 4304130061
Well Name: TWIST CYN FED 21-1A(RIGSKID)
 Township 21.0 S Range 01.0 E Section 21
Meridian: SLBM
 Operator: WOLVERINE GAS & OIL CO UT

Map Prepared:
 Map Produced by Diana Mason

- | | |
|---------------|---------------------------|
| Units | Wells Query Events |
| STATUS | ✕ <all other values> |
| ACTIVE | GIS_STAT_TYPE |
| EXPLORATORY | <Null> |
| GAS STORAGE | ◆ APD |
| NF PP OIL | ⊙ DRL |
| NF SECONDARY | ⊙ GI |
| PI OIL | ⊙ GS |
| PP GAS | ⊙ LA |
| PP GEOTHERML | ⊕ NEW |
| PP OIL | ⊕ OPS |
| SECONDARY | ⊙ PA |
| TERMINATED | ⊙ PGW |
| Fields | ⊙ POW |
| STATUS | ⊙ RET |
| ACTIVE | ⊙ SGW |
| COMBINED | ⊙ SOW |
| Sections | ⊙ TA |
| Township | ⊙ TW |
| | ⊙ WD |
| | ⊙ WI |
| | ⊙ WS |



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

5. Lease Serial No. **UTU-80587**

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. **Wolverine Federal Unit**

8. Lease Name and Well No. **Twist Canyon Federal 21-1**

9. AFI Well No. **4304130058**

10. Field and Pool, or Exploratory **Exploratory**

11. Sec., T., R., M., on Block and Survey or Area **21, T21S, R1E**
SLB&M

12. County or Parish **Sevier** 13. State **UT**

14. Date Spudded **08/10/2008** 15. Date T.D. Reached **08/22/2008** 16. Date Completed **9-2-08**
 D & A Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* **5952 KB**

18. Total Depth: MD **807'** 19. Plug Back T.D.: MD **0 (Surface)** 20. Depth Bridge Plug Set: MD
TVD **807'** TVD **0** TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) **None (mud)**

22. Was well cored? No Yes (Submit analysis)
Was DST run? No Yes (Submit report)
Directional Survey? No Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
40"	36" cond.		Surface	55 GL					
26"	18 5/8" J	68.0	0	504	N/A	465 Prem. 1350 Neat	97 (top job)	250 0	0 0

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
N/A								

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) N/A						
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
N/A	

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	P & A
			→						

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

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*(See instructions and spaces for additional data on page 2)

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
Quaternary	0	807 (TD)	Tuff, Volcaniclastic Sandstone	Tertiary Volcanics	0

32. Additional remarks (include plugging procedure):

This well was plugged and abandoned in the surface hole section because of well bore stability problems. Replacement well will be drilled on same pad. No logs were run on this surface hole.

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- Electrical/Mechanical Logs (1 full set req'd.)
 Geologic Report
 DST Report
 Directional Survey
 Sundry Notice for plugging and cement verification
 Core Analysis
 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Edward A. HigueraTitle Manager - Development

Signature

Date 10/10/2008

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

October 21, 2008

Wolverine Gas & Oil Company of Utah. LLC
55 Campau NW
Grand Rapids, MI 49503-2616

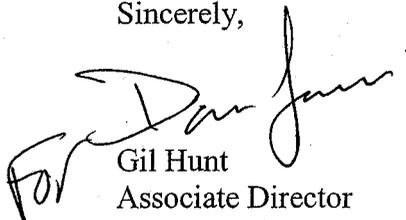
Re: Twist Canyon Federal 21-1A Well, Surface Location 910' FNL, 1199' FWL, NW NW,
Sec. 21, T. 21 South, R. 1 East, Bottom Location 2500' FSL, 1500' FWL, NE SW,
Sec. 21, T. 21 South, R. 1 East, Sevier County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-041-30061.

Sincerely,


Gil Hunt
Associate Director

pab
Enclosures

cc: Sevier County Assessor
Bureau of Land Management, Utah State Office

Operator: Wolverine Gas & Oil Company of Utah, LLC
Well Name & Number Twist Canyon Federal 21-1A
API Number: 43-041-30061
Lease: UTU-80587

Surface Location: NW NW Sec. 21 T. 21 South R. 1 East
Bottom Location: NE SW Sec. 21 T. 21 South R. 1 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

ENTITY ACTION FORM

Operator: Wolverine Gas and Oil Company of Utah, LLC Operator Account Number: N 1655
 Address: 55 Campau NW, One Riverfront Plaza
city Grand Rapids
state MI zip 49503 Phone Number: (616) 458-1150

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304130061	Twist Canyon Federal 21-1A		NWNW	21	21S	1E	Sevier
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	17042	9/13/2008		10/28/08		
Comments: <i>TORWP Rigskid from 4304130058 BHL = NESW</i>							CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Helene Bardolph - Wolverine Gas & Oil Corp.

Name (Please Print)

Helene Bardolph

Signature

Engineering Administration

Title

9/15/2008

Date

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SEP 15 2008

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-80587
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: Wolverine Federal Unit
2. NAME OF OPERATOR: Wolverine Gas and Oil Company of Utah, LLC		8. WELL NAME and NUMBER: Twist Canyon Federal 21-1A
3. ADDRESS OF OPERATOR: 55 Campau NW CITY Grand Rapids STATE MI ZIP 49503-2616		9. API NUMBER: 4304130061
PHONE NUMBER: (616) 458-1150		10. FIELD AND POOL, OR WILDCAT: Wildcat
4. LOCATION OF WELL FOOTAGES AT SURFACE: 910' FNL, 1199' FWL		COUNTY: Sevier
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 21 21S 1E S		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____ <input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input checked="" type="checkbox"/> OTHER: <u>Activity Update</u>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

CONTINUED CONFIDENTIAL STATUS REQUESTED

The drilling rig was released on 1/7/2009. A completion rig moved in on 1/20/2009. A CBL was run and the well was perforated at 8688'-8703' and 8710'-8721'. The perforated intervals were swab tested and then pump tested from 2/3/2009 through 2/13/2009 with no oil recovery. The well has been idle since 2/13/2009. It is planned to continue pump testing the currently perforated intervals before plugging back and perforating other potentially productive intervals.

NAME (PLEASE PRINT) <u>Ellis M. Peterson</u>	TITLE <u>Sr. Production Engineer</u>
SIGNATURE	DATE <u>2/27/2009</u>

(This space for State use only)

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MAR 05 2009

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU-80587
2. Name of Operator Wolverine Gas and Oil Company of Utah, LLC		6. If Indian, Allottee or Tribe Name NA
3a. Address 55 Campau NW, Grand Rapids, MI 49503	3b. Phone No. (include area code) 616-458-1150	7. If Unit or CA/Agreement, Name and/or No. Wolverine Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 910' FNL, 1199' FWL, Sec. 21, T21S, R1E, SLB&M		8. Well Name and No. Twist Canyon Federal 21-1A
		9. API Well No. 43-041-30061
		10. Field and Pool, or Exploratory Area Wildcat
		11. County or Parish, State Sanpete County, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input checked="" type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The drilling rig was released on 1/7/2009. A completion rig moved in on 1/20/2009. Perforations at 8688'-8703' and 8710'-8721' were plugged back with a CIBP at 8680'. The Navajo was perforated at 8490'-8510' and 8546'-8566' and swab tested with recovery of formation water but no significant volumes of oil or gas. It is planned to set a cement retainer at 8450', pump cement into the perforations at 8490'-8510' and 8546'-8566', dump sufficient cement on top of the cement retainer to leave a 100-foot plug, and fill the well with 9 ppg fluid containing bactericide and corrosion inhibitor. A temporary well cap will be installed and pressure tested and the well will be left suspended pending review of options to side track or permanently abandon the well.

Attachments: Procedure, Well Bore Diagram

COPY SENT TO OPERATOR

Date: 4.28.2009

Initials: KS

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Ellis Peterson	Title Sr. Production Engineer
Signature <i>Ellis Peterson</i>	Date 03/25/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <i>D. J. [Signature]</i>	Title Pet. Eng.	Date 4/23/09
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office DOG-M	Federal Approval Of This Action Is Necessary

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

MAR 31 2009

Tight Hole

Wolverine Gas & Oil Company of Utah, LLC Completion Procedure

Twist Canyon Federal 21-1A

Purpose: Plug back Navajo Formation perforations and temporarily abandon well.

PERTINENT INFORMATION

Location: 910' FNL, 1199' FWL (NW-NW)
Section 21, Township 21 South, Range 1 East
Sevier County, Utah

Elevation: 5926' GL, 5952' KB

TD: 14,775'

PBTD: 8670' (CIBP @ 8680' w/ 1 sk of cement on top)

API No.: 43-041-30061

Casing: 18-5/8", 87.5# @ 396', cemented to surface
13-3/8", 68.0# @ 1133', cemented to surface
9-5/8", 53.5# T-95 @ 8552', cemented to surface
5-1/2", 23.0#, TN80SS, Tenaris MS T&C @ 9417', cemented with 330 sks Class
"G" w/ 35% Si

Wellhead: Tubing Head Flange – 7-1/16" 5k w/ 2-7/8" EUE top connection

Tubing: 2-7/8", 6.5#, L-80, EUE, 8rd with Arrowset 1-X packer at 8578' and pump cavity at
8558' KB

Production Casing Specs: 5-1/2", 23.0#, TN80SS, MS T&C, ID: 4.670" Drift: 4.545"
Collapse: 11,160 psi Burst: 10,560 psi (80% 8448 psi)

Tubing Specs: 2-7/8", 6.5#, L-80, EUE, 8rd, ID: 2.441" Drift: 2.347"
Collapse: 11,170 psi Burst: 10,570 psi (80% 8456 psi)
Joint: 145,000 lbs (80% 116,000 lbs)

Capacities: 5-1/2", 23.0#: 0.0211 Bbls/ft, 0.1185 ft³/ft
2-7/8", 6.5#: 0.00579 Bbls/ft, 0.0325 ft³/ft
5-1/2" x 2-7/8" Annulus: 0.0131 Bbls/ft, 0.0757 ft³/ft

BH Temperature: 198°F @ 9300' MD (8900 TVD)

Existing Navajo Perforations:

8490'- 8510' MD (8081'- 8101' TVD), 20', 80 holes
8546'- 8566' MD (8137'- 8157' TVD), 20', 80 holes
8688' – 8703' MD (8279' – 8294' TVD), 15', 90 holes (below CIBP)
8710' – 8721' MD (8301' – 8312' TVD), 11', 66 holes (below CIBP)

All depths are referenced to Schlumberger RSL-GR-CCL dated 1/21/2009.

PROCEDURE

Note: A completion rig is on the well after stimulating and swab testing the Upper Navajo 1.

1. RU and swab as needed to collect Navajo 1 fluid samples.
2. Fill well with completion fluid, release packer and POOH with tubing and tools.
3. RIH with a 5-1/2" (23#) CICR on 2-7/8" tubing and set it at 8450'. Pressure test tubing to 2500 psi and then shear out of CICR.
4. RU cementing service to squeeze cement in perforations at 8490'- 8566' and to set an isolation plug above the Navajo Formation top using 25 sacks of premium cement containing additives per selected service company recommendation. Install a returns line from the casing valve to rig tank. Perform cement squeeze as follows:

Fluids and Additives:

Fresh Water: 60+ Bbls

Cement: 25 sacks of Premium Class "G" with 4 hour pumping time at 200°F (15.8 ppg, 1.15 CF/sk).

Circulation Fluid: 200 Bbls of 9 ppg salt water containing 84 gallons (1%) of Baker Petrolite CRW132

Maximum Squeeze Pressure: 2500 psi

Pump Schedule:

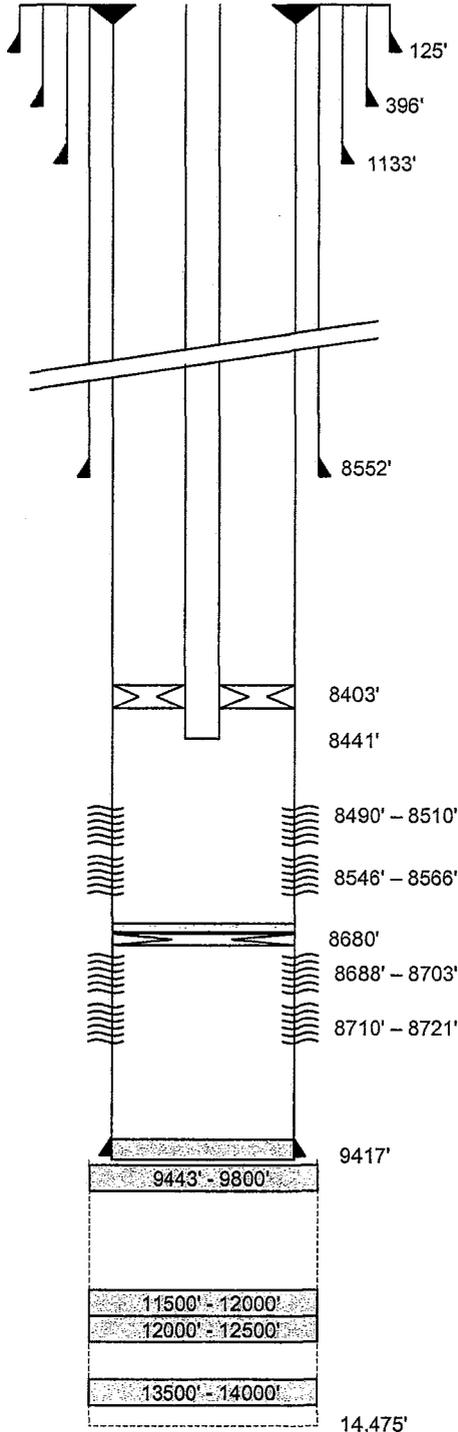
- A. Pressure test surface lines to 2500+ psi.
 - B. Pump 5 Bbls of fresh water.
 - C. Mix and pump 25 sacks of cement (5.1 Bbls).
 - D. Displace cement with 41.5 Bbls of fresh water (+ volume of surface lines).
 - E. Sting into CICR.
 - F. Pump 4.8 Bbls of fresh water at 2000 psi to squeeze cement into perforations.
 - G. Unsting from CICR and pull tubing up 4 joints (2 stands) to dump 2.6 Bbls on top of CICR.
 - H. Reverse circulate clean and fill well with weighted fluid by pumping 160 Bbls of circulation fluid down casing.
 - I. RD cementing service.
5. POOH laying down tubing and CICR stinger.
 6. Fill well with an additional ~18.5 Bbls of 9 ppg circulation fluid.
 7. ND BOPE and install temporary well cap.
 8. Pressure test casing and well cap to 1000 psi. Include pressure test results in daily completion report.
 9. RDMOSU



**Twist Canyon Federal 21-1A
API # 43-041-30061
Exploratory Well
Section 21, T21S, R1E
Sevier County, Utah**

(Not to Scale)

Ground Elevation: 5,926'
KB Elevation: 5,952'



TD = 14475' MD (14066' TVD)
PBTD = 9312' MD (8903' TVD)

Deviated Well

Surface: 910' FNL 1199' FWL, NW NW, 21-21S-1E
Top of Pay (8477' MD): 2493' FSL, 1427' FWL, NE SW, 21-21S-1E
Total Depth (14475' MD): 2530' FSL, 1426' FWL, NE SW, 21-21S-1E

Conductor Casing (9/09/08)

Size: 30", 157.5#, 0.50" wall
Depth Landed: 125' KB
Cement Data: Cemented to surface 15 yds redi-mix

Surface Casing 1 (9/19/08)

Size/Wt/Grade: 18-5/8", 87.5#, J-55, BTC
Depth Landed: 396' KB
Cement Data: 195 sks VeriCem (11 ppg, 3.58 cf/sk), 345 sks Premium G (15.8 ppg, 1.17 cf/sk), top-out 160 sks "G" (15.6 ppg, 1.2 cf/sk)

Surface Casing 2 (9/27/08)

Size/Wt/Grade: 13-3/8", 68#, J-55, BTC
Depth Landed: 1133' KB
Cement Data: 175 sks VeriCem (10.5 ppg, 4.41 cf/sk), 435 sks "G" (15.6 ppg, 1.29 cf/sk)

Intermediate Casing (11/17/08)

Size/Wt/Grade: 9-5/8", 53.5#, T-95, SLX HydriL
Depth Landed: 8552' KB w/ stage tool at 6401' KB
Cement Data: Stage 1: 800 sks Premium G (15.8 ppg, 1.31 cf/sk), Stage 2: lead- 300 sks VeriCem (11 ppg, 3.33 cf/sk), tail- 1550 sks Premium G (15.8 ppg, 1.25 cf/sk)

Production Casing (1/06/09)

Size/Wt/Grade: 5-1/2", 23.0#, Tenaris TN80SS, MS T&C
Properties: 10560 psi burst, 4.545" drift, 4.670" ID, 0.0211 Bbl/ft
Depth Landed: 9417' KB
Cement Data: 330 sks "G" w/ 35% Si (15.8 ppg, 1.7 cf/sk)
CBL Cement Top Behind Casing: ~7020'

Tubing (2/13/09)

EOT @ 8441' (8032' KB TVD-WLM), Packer @ 8403' (7994' TVD-WLM)

Navaio Perforations

8490' - 8510' MD (8081' - 8101' TVD), 20', 80 holes (3/12/09)
8546' - 8566' MD (8137' - 8157' TVD), 20', 80 holes (3/12/09)
8688' - 8703' MD (8279' - 8294' TVD), 15', 90 holes (1/23/09)
8710' - 8721' MD (8301' - 8312' TVD), 11', 66 holes (1/23/09)

PBTD

(3/11/09) CIBP @ 8680' MD (8271' TVD) w/ 1 sk cement on top
(1/21/09) CBL PBTD @ 9312' MD (8903' TVD)
(1/04/09) Cement plug top @ 9443' MD (9034' TVD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well Oil Well Gas Well Dry Other

b. Type of Completion: New Well Work Over Deepen Plug Back Diff. Resvrt. .
Other _____

2. Name of Operator **Wolverine Gas and Oil Co. of Utah, LLC**

3. Address **55 Campau NW, Grand Rapids, MI 49503** 3a. Phone No. (include area code) **616-458-1150**

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface **910' FNL, 1199' FWL, Sec. 21, T21S, R1E, SLB&M**
At top prod. interval reported below **2493' FSL, 1427' FWL, Sec. 21, T21S, R1E**
At total depth **2476' 4' FSL, 1424' FWL, Sec. 21, T21S, R1E** *per HSM review*

5. Lease Serial No. **UTU-80587**

6. If Indian, Allottee or Tribe Name **N.A.**

7. Unit or CA Agreement Name and No. **Wolverine Federal Unit**

8. Lease Name and Well No. **Twist Canyon Federal 21-1A**

9. AFI Well No. **4304130061**

10. Field and Pool, or Exploratory **Wildcat**

11. Sec., T., R., M., on Block and Survey or Area **21, T21S, R1E, NESW, SLB&M**

12. County or Parish **Sevier** 13. State **UT**

14. Date Spudded **09/06/2008** 15. Date T.D. Reached **12/26/2008** 16. Date Completed **03/30/2009**
 D & A Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* **5952' KB, 5926' GL**

18. Total Depth: MD **14475'** TVD **14066'** 19. Plug Back T.D.: MD **9443'** TVD **9034'** 20. Depth Bridge Plug Set: MD **8452** TVD **8043**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) **DLL/MSFL/GR, SDL/DSN/GR, XRM/BCS, RST/GR/CCL, CBL/CCL/GR**

22. Was well cored? No Yes (Submit analysis)
Was DST run? No Yes (Submit report)
Directional Survey? No Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
36.0"	30"	157.5	Surface	125		redi-mix	72	Surface	
26.0"	18.625 J	87.5	Surface	396		355 lite + G	230	Surf. (CIRC)	
17.5"	13.375 J	68	Surface	1133		175 lite + G	237	Surf. (CIRC)	
12.25"	9.625 T	53.5	Surface	8552	6401	2650 G +lite	1107	Surf. (CIRC)	
8.5"	5.50" TN	23.0	Surface	9417		330 G w/ Si	100	7090 (CBL)	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Navajo	8490	8721	8490-8566	0.40"	160	Cemented below CICR
B)			8688-8721	0.40"	156	Below CIBP & cement
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
8490' - 8566'	Cement squeeze using 25 sacks class G and CICR set at 8452'

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
02/03/2009	03/02/2009	24	→	0	Tr	325			Hydraulic Pump
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→	0	Tr	325			Temporarily Abandoned

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
03/14/2009	03/21/2009	8	→	0	Tr	89			Swabbing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→	0	Tr	24			Temporarily Abandoned

*(See instructions and spaces for additional data on page 2)

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Cor. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Cor. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Vented

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
Navajo 1	8477		Water	Arapien	1022
				Twin Creek 1	8082
				Navajo 1	8477
				Kayenta	11969
				Wingate	12123
				Navajo2 (overturned)	12745
				Twin Creek2 (overturned)	13116
				Arapien2	13138
Twin Creek3	13526				
Navajo3	13920				

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

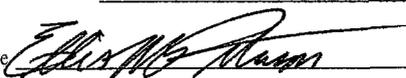
- Electrical/Mechanical Logs (1 full set req'd.)
 Geologic Report
 DST Report
 Directional Survey
 Sundry Notice for plugging and cement verification
 Core Analysis
 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Ellis Peterson

Title Sr. Production Engineer

Signature



Date 04/07/2009

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL
FORM APPROVED
OMB No. 0040-0077
Expires March 31, 2007
Lose Stamp
UTU-80587

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Wolverine Gas and Oil Company of Utah, LLC

3a. Address
55 Campau NW, Grand Rapids, MI 49503

3b. Phone No. (include area code)
616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
910' FNL, 1199' FWL, Sec. 21, T21S, R1E, SLB&M

6. If Indian, Allottee or Tribe Name
NA

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Unit

8. Well Name and No.
Twist Canyon Federal 21-1A

9. API Well No.
43-041-30061

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Sevier County, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input checked="" type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Perforations at 8490'-8510' and 8546'-8566' were permanently abandoned by setting a CICR at 8452' and pumping 25 sacks of Premium Class G cement (15.8 ppg, 1.15 cf/sk) with 2.4 Bbls of cement being placed below the CICR and 2.6 Bbls of cement being dumped on top of the CICR. The well was filled from the new PBTD at 8329' to surface with 9 ppg brine containing corrosion inhibitor and biocide chemicals. A well cap was bolted onto the casing head the casing and plugs were pressure tested to 1000 psi. The well is left suspended pending review of options to side track or permanently abandon the well.

Attachments: Well Bore Diagram

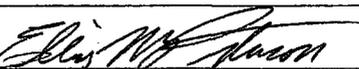
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APR 22 2009
 DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
 Name (Printed/Typed)

Ellis Peterson

Title **Sr. Production Engineer**

Signature



Date

04/06/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

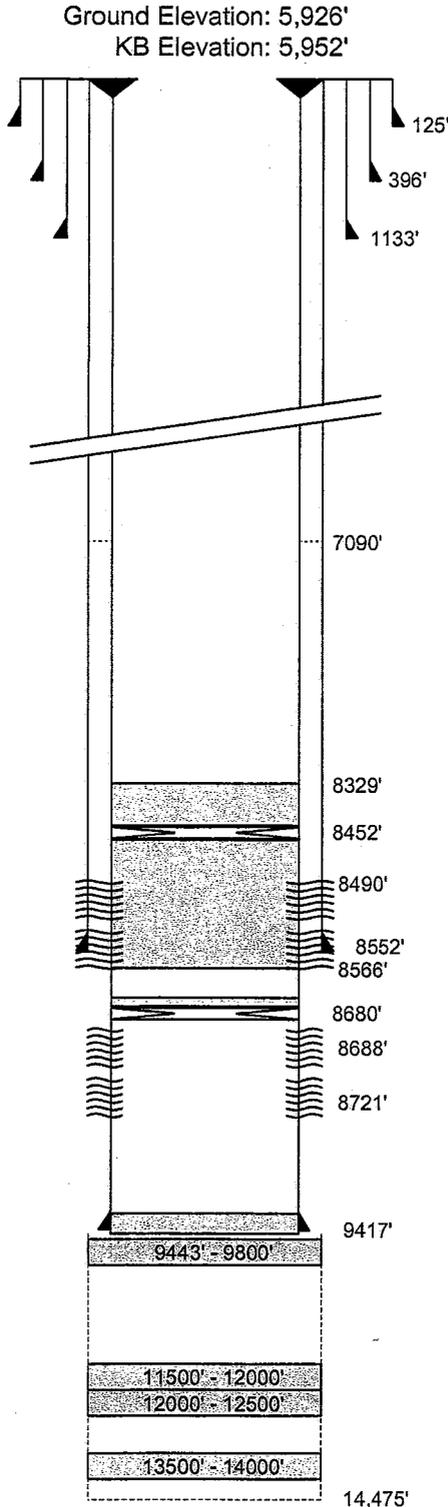
(Instructions on page 2)

CONFIDENTIAL



Twist Canyon Federal 21-1A
API # 43-041-30061
Exploratory Well
Section 21, T21S, R1E
Sevier County, Utah

(Not to Scale)



Deviated Well

Surface: 910' FNL 1199' FWL, NW NW, 21-21S-1E
 Top of Pay (8477' MD): 2493' FSL, 1427' FWL, NE SW, 21-21S-1E
 Total Depth (14475' MD): 2530' FSL, 1426' FWL, NE SW, 21-21S-1E

Conductor Casing (9/09/08)

Size: 30", 157.5#, 0.50" wall
 Depth Landed: 125' KB
 Cement Data: Cemented to surface 15 yds redi-mix

Surface Casing 1 (9/19/08)

Size/Wt/Grade: 18-5/8", 87.5#, J-55, BTC
 Depth Landed: 396' KB
 Cement Data: 195 sks VeriCem (11 ppg, 3.58 cf/sk), 345 sks Premium G (15.8 ppg, 1.17 cf/sk), top-out 160 sks "G" (15.6 ppg, 1.2 cf/sk)

Surface Casing 2 (9/27/08)

Size/Wt/Grade: 13-3/8", 68#, J-55, BTC
 Depth Landed: 1133' KB
 Cement Data: 175 sks VeriCem (10.5 ppg, 4.41 cf/sk), 435 sks "G" (15.6 ppg, 1.29 cf/sk)

Intermediate Casing (11/17/08)

Size/Wt/Grade: 9-5/8", 53.5#, T-95, SLX Hydril
 Depth Landed: 8552' KB w/ stage tool at 6401' KB
 Cement Data: Stage 1: 800 sks Premium G (15.8 ppg, 1.31 cf/sk), Stage 2: lead- 300 sks VeriCem (11 ppg, 3.33 cf/sk), tail- 1550 sks Premium G (15.8 ppg, 1.25 cf/sk)

Production Casing (1/06/09)

Size/Wt/Grade: 5-1/2", 23.0#, Tenaris TN80SS, MS T&C
 Properties: 10560 psi burst, 4.545" drift, 4.670" ID, 0.0211 Bbl/ft
 Depth Landed: 9417' KB
 Cement Data: 330 sks "G" w/ 35% Si (15.8 ppg, 1.7 cf/sk)
 CBL Cement Top Behind Casing: ~7090'

Tubing (2/13/09)

EOT @ 8441' (8032' KB TVD-WLM), Packer @ 8403' (7994' TVD-WLM)

Navajo Perforations

8490' - 8510' MD (8081' - 8101' TVD), 20', 80 holes (3/12/09)
 8546' - 8566' MD (8137' - 8157' TVD), 20', 80 holes (3/12/09)
 8688' - 8703' MD (8279' - 8294' TVD), 15', 90 holes (1/23/09)
 8710' - 8721' MD (8301' - 8312' TVD), 11', 66 holes (1/23/09)

PBTD

(3/27/09) CICR @ 8452' MD (8043' TVD) w/ 2.6 Bbls cement on top
 (3/11/09) CIBP @ 8680' MD (8271' TVD) w/ 1 sk cement on top
 (1/21/09) CBL PBTD @ 9312' MD (8903' TVD)
 (1/04/09) Cement plug top @ 9443' MD (9034' TVD)

TD = 14475' MD (14066' TVD)
 PBTD = 9312' MD (8903' TVD)

Actual Wellpath Report

Twist Canyon Federal 21-1A AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	WOLVERINE GAS & OIL COMPANY	Slot	Twist Canyon Federal 21-1A 910'FNL & 1199'FWL
Area	UTAH	Well	Twist Canyon Federal 21-1A
Field	SEVIER COUNTY	Wellbore	Twist Canyon Federal 21-1A AWB
Facility	SEC.21-T21S-R1E		

WELLPATH DATA (154 stations) † = interpolated/extrapolated station							
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
0.00†	0.000	314.290	0.00	0.00	0.00	0.00	0.00
26.00	0.000	314.290	26.00	0.00	0.00	0.00	0.00
100.00	1.810	314.290	99.99	-0.92	0.82	-0.84	2.45
200.00	4.870	327.170	199.81	-5.98	5.49	-4.27	3.13
300.00	5.430	330.470	299.40	-14.20	13.17	-8.90	0.63
400.00	5.520	329.390	398.95	-22.99	21.43	-13.68	0.14
500.00	4.610	329.620	498.56	-31.11	29.03	-18.17	0.91
600.00	3.700	328.730	598.29	-37.75	35.26	-21.87	0.91
700.00	3.170	330.200	698.11	-43.25	40.42	-24.92	0.54
800.00	2.720	329.590	797.98	-47.99	44.86	-27.50	0.45
900.00	2.900	325.870	897.86	-52.43	49.00	-30.12	0.26
1000.00	2.430	342.220	997.75	-56.77	53.11	-32.18	0.89
1156.00	1.490	349.690	1153.66	-62.05	58.26	-33.56	0.62
1247.00	1.490	17.810	1244.63	-64.30	60.55	-33.41	0.80
1340.00	0.400	340.600	1337.62	-65.72	62.01	-33.14	1.29
1433.00	0.130	306.920	1430.62	-66.11	62.38	-33.34	0.32
1526.00	0.590	142.660	1523.61	-65.77	62.06	-33.13	0.77
1617.00	0.340	155.710	1614.61	-65.10	61.44	-32.74	0.30
1708.00	0.790	306.330	1705.61	-65.28	61.57	-33.13	1.21
1800.00	0.900	240.330	1797.60	-65.44	61.58	-34.27	1.01
1895.00	0.260	220.400	1892.60	-65.01	61.05	-35.06	0.70
1990.00	0.190	151.840	1987.59	-64.72	60.75	-35.12	0.27
2085.00	1.530	315.350	2082.58	-65.58	61.51	-35.94	1.80
2176.00	4.500	290.020	2173.45	-68.18	63.60	-40.15	3.50
2269.00	5.660	284.570	2266.09	-71.57	66.00	-48.01	1.35
2352.00	5.190	257.630	2348.73	-72.76	66.23	-55.64	3.09
2459.00	6.880	233.000	2455.15	-69.16	61.33	-65.49	2.85
2554.00	9.850	212.530	2549.15	-60.09	51.05	-74.41	4.38
2647.00	11.520	202.480	2640.54	-45.92	35.76	-82.24	2.68
2742.00	11.980	192.570	2733.56	-28.41	17.37	-88.01	2.18
2835.00	13.720	185.500	2824.23	-8.58	-3.03	-91.17	2.52
2930.00	17.360	175.890	2915.76	16.57	-28.39	-91.23	4.68
3025.00	19.740	172.130	3005.82	46.77	-58.43	-88.02	2.80
3117.00	23.190	167.690	3091.43	80.36	-91.53	-82.03	4.14
3210.00	26.800	165.440	3175.71	119.41	-129.72	-72.85	4.01
3303.00	26.200	163.260	3258.94	160.47	-169.68	-61.67	1.23
3398.00	26.350	164.550	3344.12	202.02	-210.08	-50.01	0.62
3492.00	26.890	169.720	3428.17	243.91	-251.11	-40.66	2.53
3587.00	26.400	170.740	3513.08	286.47	-293.09	-33.43	0.71
3680.00	26.000	170.800	3596.53	327.51	-333.62	-26.84	0.43
3778.00	26.370	166.880	3684.48	370.63	-376.03	-18.47	1.80
3873.00	26.190	163.360	3769.66	412.31	-416.66	-7.67	1.65
3963.00	26.610	167.310	3850.28	451.98	-455.36	2.44	2.01
4059.00	26.370	170.040	3936.21	494.68	-497.33	10.85	1.29
4154.00	26.630	169.340	4021.23	537.01	-539.04	18.44	0.43

Actual Wellpath Report

Twist Canyon Federal 21-1A AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	WOLVERINE GAS & OIL COMPANY	Slot	Twist Canyon Federal 21-1A 910'FNL & 1199'FWL
Area	UTAH	Well	Twist Canyon Federal 21-1A
Field	SEVIER COUNTY	Wellbore	Twist Canyon Federal 21-1A AWB
Facility	SEC.21-T21S-R1E		

WELLPATH DATA (154 stations)							
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
4249.00	26.590	174.090	4106.17	579.52	-581.11	24.57	2.24
4344.00	26.280	177.070	4191.24	621.75	-623.27	27.83	1.43
4438.00	26.370	177.780	4275.49	663.29	-664.91	29.71	0.35
4528.00	26.990	177.430	4355.91	703.56	-705.28	31.40	0.71
4626.00	26.630	174.260	4443.38	747.68	-749.35	34.59	1.50
4719.00	26.720	173.910	4526.48	789.41	-790.88	38.89	0.19
4809.00	26.970	167.990	4606.80	829.99	-830.97	45.29	2.98
4905.00	26.200	171.340	4692.65	872.88	-873.22	53.01	1.76
5002.00	26.470	170.430	4779.59	915.88	-915.70	59.83	0.50
5097.00	26.540	171.450	4864.60	958.26	-957.57	66.50	0.48
5192.00	26.510	171.340	4949.60	1000.67	-999.52	72.85	0.06
5285.00	25.930	167.930	5033.04	1041.69	-1039.92	80.23	1.74
5378.00	26.180	171.800	5116.59	1082.47	-1080.12	87.41	1.85
5469.00	26.760	167.020	5198.06	1122.93	-1119.95	94.87	2.43
5564.00	25.960	162.710	5283.19	1164.69	-1160.65	105.86	2.18
5658.00	26.630	161.250	5367.46	1205.60	-1200.24	118.74	0.99
5751.00	25.750	161.600	5450.92	1245.86	-1239.15	131.82	0.96
5844.00	26.630	164.070	5534.37	1286.29	-1278.36	143.92	1.51
5937.00	26.090	169.520	5617.71	1327.32	-1318.52	153.36	2.67
6030.00	26.370	170.040	5701.14	1368.37	-1358.97	160.65	0.39
6125.00	26.190	171.470	5786.32	1410.41	-1400.48	167.41	0.69
6218.00	26.760	171.060	5869.56	1451.85	-1441.46	173.71	0.64
6314.00	24.430	170.740	5956.14	1493.30	-1482.41	180.26	2.43
6407.00	22.300	173.110	6041.51	1530.17	-1518.92	185.47	2.50
6499.00	19.690	175.320	6127.39	1563.11	-1551.70	188.83	2.96
6592.00	18.370	177.420	6215.31	1593.37	-1581.95	190.77	1.60
6684.00	17.490	173.820	6302.85	1621.64	-1610.18	192.91	1.54
6780.00	17.730	172.180	6394.35	1650.68	-1639.01	196.45	0.57
6873.00	18.110	173.670	6482.84	1679.30	-1667.40	199.97	0.64
6967.00	17.800	170.570	6572.26	1708.26	-1696.10	203.94	1.07
7062.00	16.540	165.660	6663.03	1736.20	-1723.52	209.67	2.02
7155.00	14.130	173.100	6752.72	1760.69	-1747.63	214.31	3.34
7250.00	11.690	165.290	6845.32	1781.84	-1768.45	218.15	3.15
7345.00	10.120	164.810	6938.60	1799.65	-1785.82	222.78	1.66
7432.00	7.830	165.300	7024.53	1813.10	-1798.93	226.29	2.63
7534.00	6.180	170.470	7125.77	1825.47	-1811.06	228.96	1.73
7627.00	3.530	178.120	7218.42	1833.33	-1818.86	229.88	2.93
7721.00	2.450	187.860	7312.30	1838.15	-1823.74	229.70	1.27
7812.00	0.970	217.020	7403.25	1840.58	-1826.29	228.97	1.84
7903.00	0.760	268.000	7494.24	1841.07	-1826.92	227.91	0.84
7997.00	0.120	225.880	7588.24	1841.07	-1827.01	227.21	0.72
8099.00	0.030	283.570	7690.24	1841.13	-1827.08	227.11	0.10
8193.00	0.570	298.690	7784.24	1840.84	-1826.85	226.68	0.58
8287.00	0.370	337.510	7878.24	1840.28	-1826.34	226.15	0.39
8380.00	0.150	95.840	7971.24	1840.01	-1826.08	226.16	0.50

Actual Wellpath Report

Twist Canyon Federal 21-1A AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
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Area	UTAH	Well	Twist Canyon Federal 21-1A
Field	SEVIER COUNTY	Wellbore	Twist Canyon Federal 21-1A AWB
Facility	SEC.21-T21S-R1E		

WELLPATH DATA (154 stations)							
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
8473.00	0.590	272.240	8064.23	1839.96	-1826.07	225.80	0.80
8504.00	0.530	292.200	8095.23	1839.87	-1826.01	225.51	0.65
8599.00	0.260	0.000	8190.23	1839.44	-1825.63	225.10	0.52
8692.00	0.180	0.000	8283.23	1839.08	-1825.27	225.10	0.09
8786.00	0.250	0.000	8377.23	1838.73	-1824.92	225.10	0.07
8879.00	0.230	0.000	8470.23	1838.35	-1824.53	225.10	0.02
8973.00	0.270	0.000	8564.23	1837.94	-1824.12	225.10	0.04
9067.00	0.270	0.000	8658.23	1837.50	-1823.68	225.10	0.00
9161.00	0.560	0.000	8752.22	1836.82	-1823.00	225.10	0.31
9256.00	0.210	0.000	8847.22	1836.19	-1822.36	225.10	0.37
9536.00	0.230	0.000	9127.22	1835.12	-1821.28	225.10	0.01
9631.00	0.350	0.000	9222.22	1834.65	-1820.80	225.10	0.13
9726.00	0.340	0.000	9317.22	1834.08	-1820.23	225.10	0.01
9820.00	0.320	0.000	9411.22	1833.54	-1819.69	225.10	0.02
9915.00	0.210	0.000	9506.21	1833.11	-1819.25	225.10	0.12
10009.00	0.090	0.000	9600.21	1832.86	-1819.01	225.10	0.13
10104.00	0.210	0.000	9695.21	1832.62	-1818.76	225.10	0.13
10200.00	0.530	0.000	9791.21	1832.00	-1818.14	225.10	0.33
10295.00	0.350	0.000	9886.21	1831.28	-1817.41	225.10	0.19
10387.00	0.350	0.000	9978.21	1830.72	-1816.84	225.10	0.00
10481.00	0.260	0.000	10072.21	1830.22	-1816.34	225.10	0.10
10575.00	0.260	0.000	10166.21	1829.80	-1815.92	225.10	0.00
10671.00	0.350	0.000	10262.20	1829.29	-1815.41	225.10	0.09
10765.00	0.440	0.000	10356.20	1828.65	-1814.76	225.10	0.10
10859.00	0.180	0.000	10450.20	1828.15	-1814.25	225.10	0.28
10953.00	0.260	0.000	10544.20	1827.79	-1813.89	225.10	0.09
11047.00	0.350	0.000	10638.20	1827.29	-1813.39	225.10	0.10
11141.00	0.350	0.000	10732.20	1826.72	-1812.81	225.10	0.00
11235.00	0.350	0.000	10826.19	1826.15	-1812.24	225.10	0.00
11330.00	0.530	0.000	10921.19	1825.43	-1811.51	225.10	0.19
11426.00	0.180	0.000	11017.19	1824.84	-1810.92	225.10	0.36
11518.00	0.430	0.000	11109.19	1824.35	-1810.43	225.10	0.27
11613.00	0.530	0.000	11204.18	1823.56	-1809.63	225.10	0.11
11707.00	0.520	0.000	11298.18	1822.71	-1808.77	225.10	0.01
11803.00	0.530	0.000	11394.18	1821.84	-1807.89	225.10	0.01
11898.00	0.330	0.000	11489.17	1821.13	-1807.18	225.10	0.21
11994.00	0.460	0.000	11585.17	1820.47	-1806.51	225.10	0.14
12129.00	0.050	0.000	11720.17	1819.88	-1805.91	225.10	0.30
12224.00	0.190	0.000	11815.17	1819.68	-1805.72	225.10	0.15
12319.00	0.150	0.000	11910.17	1819.40	-1805.43	225.10	0.04
12414.00	0.090	0.000	12005.17	1819.20	-1805.23	225.10	0.06
12507.00	0.130	0.000	12098.17	1819.03	-1805.06	225.10	0.04
12603.00	0.060	0.000	12194.17	1818.87	-1804.90	225.10	0.07
12717.00	0.350	0.000	12308.17	1818.46	-1804.49	225.10	0.25
12798.00	0.620	0.000	12389.17	1817.78	-1803.80	225.10	0.33

Actual Wellpath Report

Twist Canyon Federal 21-1A AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	WOLVERINE GAS & OIL COMPANY	Slot	Twist Canyon Federal 21-1A 910'FNL & 1199'FWL
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Field	SEVIER COUNTY	Wellbore	Twist Canyon Federal 21-1A AWB
Facility	SEC.21-T21S-R1E		

WELLPATH DATA (154 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
12894.00	0.620	0.000	12485.16	1816.75	-1802.76	225.10	0.00
12989.00	1.320	0.000	12580.15	1815.16	-1801.16	225.10	0.74
13079.00	0.440	0.000	12670.13	1813.79	-1799.77	225.10	0.98
13175.00	0.350	0.000	12766.13	1813.13	-1799.11	225.10	0.09
13269.00	0.440	0.000	12860.13	1812.49	-1798.46	225.10	0.10
13363.00	0.530	0.000	12954.13	1811.70	-1797.67	225.10	0.10
13459.00	0.260	0.000	13050.12	1811.04	-1797.01	225.10	0.28
13554.00	0.350	0.000	13145.12	1810.54	-1796.50	225.10	0.09
13649.00	0.530	0.000	13240.12	1809.82	-1795.77	225.10	0.19
13744.00	0.620	0.000	13335.11	1808.87	-1794.82	225.10	0.09
13837.00	0.440	0.000	13428.11	1808.02	-1793.96	225.10	0.19
13933.00	0.260	0.000	13524.11	1807.44	-1793.37	225.10	0.19
14028.00	0.350	0.000	13619.11	1806.94	-1792.87	225.10	0.09
14123.00	0.790	0.000	13714.10	1806.00	-1791.92	225.10	0.46
14219.00	0.620	0.000	13810.10	1804.83	-1790.74	225.10	0.18
14314.00	0.180	0.000	13905.09	1804.17	-1790.08	225.10	0.46
14408.00	0.350	0.000	13999.09	1803.74	-1789.64	225.10	0.18
14447.00	0.620	0.000	14038.09	1803.41	-1789.31	225.10	0.69
14475.00†	0.620	0.000	14066.09	1803.11	-1789.01	225.10	0.00

HOLE & CASING SECTIONS

Ref Wellbore: Twist Canyon Federal 21-1A AWB Ref Wellpath: Twist Canyon Federal 21-1A AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	26.00	0.00	26.00	26.00	0.00	0.00	0.00	0.00
13.375in Casing Surface	26.00	1128.00	1102.00	26.00	1125.67	0.00	0.00	57.51	-33.41



**WOLVERINE GAS AND OIL COMPANY
OF UTAH, LLC**

Energy Exploration in Partnership with the Environment

April 7, 2009

Mr. Stan Andersen
Fluid Minerals Group
Bureau of Land Management
Richfield Field Office
150 East 900 North
Richfield, Utah 84701

Re: Well Completion Report - Wolverine Gas and Oil Company of Utah, LLC
Twist Canyon Federal 21-1A (BLM Completion Report)

Dear Mr. Andersen:

Wolverine Gas and Oil Company of Utah, LLC respectfully submits the enclosed Well Completion Report (Form 3160-4) for the Twist Canyon Federal 21-1A exploratory well. Also enclosed are copies of logs and other materials required to be submitted with the Well Completion Report.

Please accept this letter as Wolverine's written request for confidential treatment of all information pertaining to this well.

Sincerely,

Ellis M. Peterson
Senior Production Engineer
Wolverine Gas and Oil

Cc w/ attachments: Gil Hunt, UDOGM

CONFIDENTIAL

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
UTU-80587

If Indian, Allottee or Tribe Name
NA

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Unit

8. Well Name and No.
Twist Canyon Federal 21-1A

9. API Well No.
43-041-30061

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Sevier County, Utah

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator **Wolverine Gas and Oil Company of Utah, LLC**

3a. Address
55 Campau NW, Grand Rapids, MI 49503

3b. Phone No. (include area code)
616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
910' FNL, 1199' FWL, Sec. 21, T21S, R1E, SLB&M

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

It is proposed to plug and abandon the Twist Canyon Federal 21-1A well by cutting off and pulling 5-1/2" production casing from approximately 7000' or shallowest free point, and then setting cement plugs spaced with fluid as follows: 9 ppg salt water from current PBTD of 8329' to 150' below top of cut-off 5-1/2" casing, premium cement plug from 150' inside cut-off 5-1/2" casing to 150' above the casing stub, 9 ppg salt water from casing stub cement plug to 4200', premium cement at 3910' to 4200', 9 ppg salt water from 3910' to 1280', premium cement plug from 990' to 1280', fresh water from 990' to 50', and cement plug from 50' to surface. All casing will be cut off at least 3' below ground level and a steel plate with inscribed well identity and location will be welded over the casing. See attached wellbore diagram and procedure for details.

Attachments: Well Bore Diagram, P&A Procedure

COPY SENT TO OPERATOR

Date: 7.28.2009

Initials: KJ

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed) **Ellis Peterson** Title **Sr. Production Engineer**

Signature *Ellis Peterson* Date **07/01/2009**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *[Signature]* Title **Pet Eng.** Date **7/20/09**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office **DOGm** Federal Approval Of This Action Is Necessary

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

RECEIVED
JUL 08 2009

Tight Hole

Wolverine Gas & Oil Company of Utah, LLC Completion Procedure

Twist Canyon Federal 21-1A

Purpose: Plug and abandon the well.

PERTINENT INFORMATION

Location: 910' FNL, 1199' FWL (NW-NW)
Section 21, Township 21 South, Range 1 East
Sevier County, Utah

Elevation: 5926' GL, 5952' KB

TD: 14,775'

PBTD: 8329' (CIBP @ 8452' w/ 2.6 Bbls of cement on top)

API No.: 43-041-30061

Casing: 18-5/8", 87.5# @ 396', cemented to surface
13-3/8", 68.0# @ 1133', cemented to surface
9-5/8", 53.5# T-95 @ 8552', cemented to surface
5-1/2", 23.0#, TN80SS, Tenaris MS T&C @ 9417', cemented with 330 sks Class
"G" w/ 35% Si

Wellhead: Tubing Head Flange – 7-1/16" 5k w/ 2-7/8" EUE top connection

Tubing: 2-7/8", 6.5#, L-80, EUE, 8rd with Arrowset 1-X packer at 8578' and pump cavity at
8558' KB

Production Casing Specs: 5-1/2", 23.0#, TN80SS, MS T&C, ID: 4.670" Drift: 4.545"
Collapse: 11,160 psi Burst: 10,560 psi (80% 8448 psi)

Tubing Specs: 2-7/8", 6.5#, L-80, EUE, 8rd, ID: 2.441" Drift: 2.347"
Collapse: 11,170 psi Burst: 10,570 psi (80% 8456 psi)
Joint: 145,000 lbs (80% 116,000 lbs)

Capacities: 5-1/2", 23.0#: 0.0211 Bbls/ft, 0.1185 ft³/ft
2-7/8", 6.5#: 0.00579 Bbls/ft, 0.0325 ft³/ft
5-1/2" x 2-7/8" Annulus: 0.0131 Bbls/ft, 0.0757 ft³/ft

BH Temperature: 198°F @ 9300' MD (8900 TVD)

Existing Navajo Perforations:

8490'- 8510' MD (8081'- 8101' TVD), 20', 80 holes (cement squeezed)
8546'- 8566' MD (8137'- 8157' TVD), 20', 80 holes (cement squeezed)
8688' – 8703' MD (8279' – 8294' TVD), 15', 90 holes (below CIBP)
8710' – 8721' MD (8301' – 8312' TVD), 11', 66 holes (below CIBP)

All depths are referenced to Schlumberger RSL-GR-CCL dated 1/21/2009.

PROCEDURE

1. MIRUSU. Check for and release any trapped pressure between casing strings.
2. Weld a lift sub to the 5-1/2" casing and tack weld the slips to the casing.
3. RU wireline service. Run a free-point survey in the 5-1/2" casing to determine cut-off depth. Pull on the 5-1/2" casing as needed to have pipe in tension at cut-off depth. Run a wireline jet cutter for 5-1/2" 23# casing and sever the casing at the deepest free-point (expected at ~7000'). RD and release wireline service.
4. RU casing crew. Pull and lay down 5-1/2" casing. RD and release casing crew.
5. Pick up 2-7/8" tubing and RIH to 250' inside the cut-off 5-1/2" casing. Install a stripper head.
6. Mix and pump 2.0 Bbls of fresh water mixed with 100 lbs of bentonite and spot it as a 100-foot balanced bentonite plug from 250' to 150' inside the 5-1/2" casing.
7. Pull up 100' so the EOT is 150' inside the 5-1/2" casing. Pump 5 Bbls of fresh water spacer, mix and pump 70 sacks of Class G cement (15.8 ppg, 1.15 yield) per cementing company recommendation, and 5 Bbls of fresh water spacer to leave a 300' balanced plug straddling the 5-1/2" casing stub. Pull up 5 stands and reverse circulate clean with 60+ Bbls of 9 ppg salt water containing 1% Baker Petrolite CRW132.
8. POOH laying down tubing to ~4260'.
9. Mix and pump 3.9 Bbls of fresh water mixed with 200 lbs of bentonite and spot it as a 60-foot balanced bentonite plug from 4260' to 4200' in the 9-5/8" casing.
10. Pull up two stands so the EOT is at ~4200'. Pump 5 Bbls of fresh water spacer, mix and pump 100 sacks of Class G cement (15.8 ppg, 1.15 yield) per cementing company recommendation, and 5 Bbls of fresh water spacer to leave a 290' balanced plug from 4200' to 3910'. Pull up 5 stands and reverse circulate clean with 30+ Bbls of fresh water containing 1% Baker Petrolite CRW132.
11. POOH laying down tubing to ~1340'.
12. Mix and pump 3.9 Bbls of fresh water mixed with 200 lbs of bentonite and spot it as a 60-foot balanced bentonite plug from 1340' to 1280' in the 9-5/8" casing.
13. Pull up two stands so the EOT is at ~1280'. Pump 5 Bbls of fresh water spacer, mix and pump 100 sacks of Class G cement (15.8 ppg, 1.15 yield) per cementing company recommendation, and 5 Bbls of fresh water spacer to leave a 290' balanced plug from 1280' to 990'. Pull up 5 stands and reverse circulate clean with 40+ Bbls of fresh water containing 1% Baker Petrolite CRW132. RD and release cementers.
14. POOH laying down remainder of tubing. ND wellhead equipment. RDMOSU.
15. Cut off and remove all casing at the base of the cellar or 3' below ground level (which ever is greater).
16. Use cement pumping service to set a cement plug inside the 9-5/8" casing from 50' to surface using 1.0 yd of cement. Also top off the cement between casings if there is any cement-void space at surface.

17. Weld a 1/4"+ steel plate with inscribed well identification and location over the well, and leave a weep hole.
18. Backfill the cellar to pad level with compacted pad surface material.
19. Restore location and access road in accordance with surface use plan, APD conditions of approval, and as instructed by the authorized BLM officer.

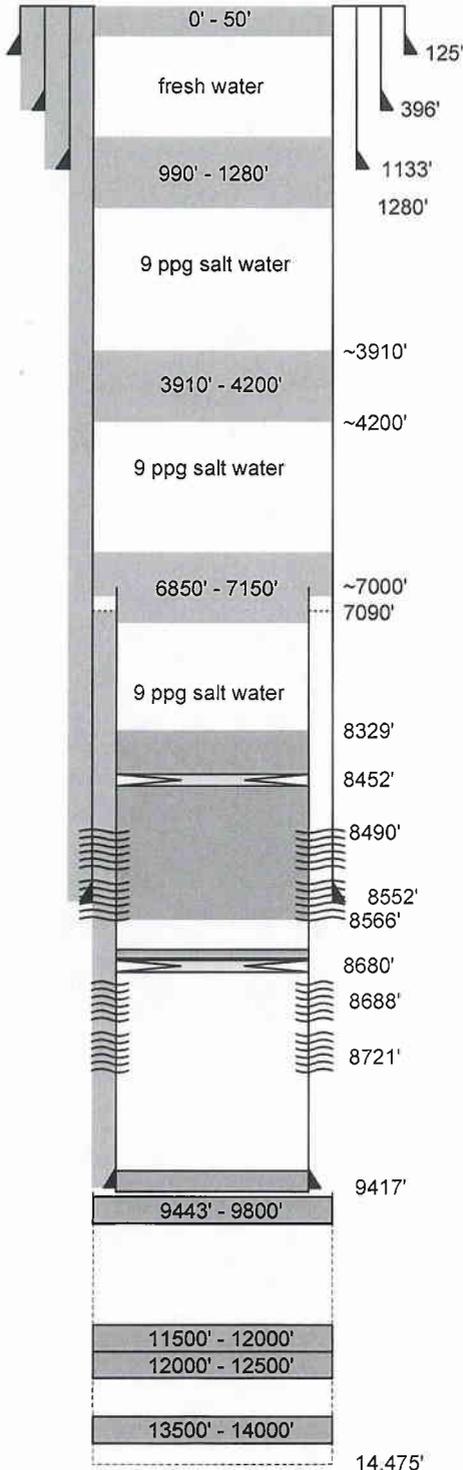


Twist Canyon Federal 21-1A
API # 43-041-30061
Exploratory Well
Section 21, T21S, R1E
Sevier County, Utah

Proposed P&A

(Not to Scale)

Ground Elevation: 5,926'
 KB Elevation: 5,952'



Deviated Well

Surface: 910' FNL 1199' FWL, NW NW, 21-21S-1E
 Top of Pay (8477' MD): 2493' FSL, 1427' FWL, NE SW, 21-21S-1E
 Total Depth (14475' MD): 2530' FSL, 1426' FWL, NE SW, 21-21S-1E

Conductor Casing (9/09/08)

Size: 30", 157.5#, 0.50" wall
 Depth Landed: 125' KB
 Cement Data: Cemented to surface 15 yds redi-mix

Surface Casing 1 (9/19/08)

Size/Wt/Grade: 18-5/8", 87.5#, J-55, BTC
 Depth Landed: 396' KB
 Cement Data: 195 sks VeriCem (11 ppg, 3.58 cf/sk), 345 sks Premium G (15.8 ppg, 1.17 cf/sk), top-out 160 sks "G" (15.6 ppg, 1.2 cf/sk)

Surface Casing 2 (9/27/08)

Size/Wt/Grade: 13-3/8", 68#, J-55, BTC
 Depth Landed: 1133' KB
 Cement Data: 175 sks VeriCem (10.5 ppg, 4.41 cf/sk), 435 sks "G" (15.6 ppg, 1.29 cf/sk) – Cement returns to surface

Intermediate Casing (11/17/08)

Size/Wt/Grade: 9-5/8", 53.5#, T-95, SLX Hydril
 Depth Landed: 8552' KB w/ stage tool at 6401' KB
 Cement Data: Stage 1: 800 sks Premium G (15.8 ppg, 1.31 cf/sk), Stage 2: lead- 300 sks VeriCem (11 ppg, 3.33 cf/sk), tail- 1550 sks Premium G (15.8 ppg, 1.25 cf/sk) – Cement returns to surface

Production Casing (1/06/09)

Size/Wt/Grade: 5-1/2", 23.0#, Tenaris TN80SS, MS T&C
 Properties: 10560 psi burst, 4.545" drift, 4.670" ID, 0.0211 Bbl/ft
 Depth Landed: 9417' KB
 Cement Data: 330 sks "G" w/ 35% Si (15.8 ppg, 1.7 cf/sk)
 CBL Cement Top Behind Casing: ~7090'

Tubing (2/13/09)

EOT @ 8441' (8032' KB TVD-WLM), Packer @ 8403' (7994' TVD-WLM)

Navajo Perforations

8490' – 8510' MD (8081' – 8101' TVD), 20', 80 holes (3/12/09)
 8546' – 8566' MD (8137' – 8157' TVD), 20', 80 holes (3/12/09)
 8688' – 8703' MD (8279' – 8294' TVD), 15', 90 holes (1/23/09)
 8710' – 8721' MD (8301' – 8312' TVD), 11', 66 holes (1/23/09)

PBTD

(3/27/09) CICR @ 8452' MD (8043' TVD) w/ 2.6 Bbls cement on top
 (3/11/09) CIBP @ 8680' MD (8271' TVD) w/ 1 sk cement on top
 (1/21/09) CBL PBTD @ 9312' MD (8903' TVD)
 (1/04/09) Cement plug top @ 9443' MD (9034' TVD)

TD = 14475' MD (14066' TVD)
 PBTD = 9312' MD (8903' TVD)



**WOLVERINE GAS AND OIL COMPANY
OF UTAH, LLC**

Energy Exploration in Partnership with the Environment

July 1, 2009

Mr. Stan Andersen
Fluid Minerals Group
Bureau of Land Management
Richfield Field Office
150 East 900 North
Richfield, Utah 84701

Re: Sundry Notice - Wolverine Gas and Oil Company of Utah, LLC
Twist Canyon Federal 21-1A

Dear Mr. Andersen:

Wolverine Gas and Oil Company of Utah, LLC respectfully submits the enclosed Sundry Notice (Form 3160-5) with attachments in triplicate for the subject well.

Sincerely,

Ellis M. Peterson
Senior Production Engineer
Wolverine Gas and Oil

Copy w/ Attachments: Gil Hunt, UDOGM

RECEIVED

JUL 08 2009

DIV. OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 10 2009

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

DIV. OF OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator **Wolverine Gas and Oil Company of Utah, LLC**

3a. Address
55 Campau NW, Grand Rapids, MI 49503

3b. Phone No. (include area code)
616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
910' FNL, 1199' FWL, Sec. 21, T21S, R1E, SLB&M

5. Lease Serial No.
UTU-80587

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7. If Unit or CA/Agreement, Name and/or No.
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8. Well Name and No.
Twist Canyon Federal 21-1A

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43-041-30061

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Sevier County, Utah

CONFIDENTIAL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Twist Canyon Federal 21-1A was plugged and abandoned as follows with the final cap placed on 08/18/2009.

- 5-1/2" casing was severed at 6936' and pulled.
- A plug consisting of 100 lbs of bentonite in 2 Bbls of water was set from 7186' to 7086'.
- A cement plug consisting of 70 sacks (14.3 Bbls) of Class G was set from 7086' to 6786'.
- 60 Bbls of salt brine were circulated into well.
- A plug consisting of 200 lbs of bentonite in 3.9 Bbls of water was set from 4260' to 4200'.
- A cement plug consisting of 100 sacks (20.5 Bbls) of Class G was set from 4200' to 3910'.
- A plug consisting of 200 lbs of bentonite in 3.9 Bbls of water was set from 1340' to 1280'.
- A cement plug consisting of 100 sacks (20.5 Bbls) of Class G was set from 1280' to 990'.
- Cement plugs were set from 50' to surface inside the 9-5/8" casing and between the 9-5/8" and 13-3/8" casing using 2" poly pipe.
- A 3/4" steel plate was welded to cap well with inscription as follows:

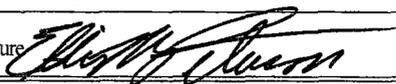
**Wolverine Gas + Oil
 Twist Canyon Fed 21-1A
 API 4304130061
 S21, T21S, R1E Sevier Co., Utah**

14. I hereby certify that the foregoing is true and correct
 Name (Printed/Typed)

Ellis Peterson

Title **Sr. Production Engineer**

Signature



Date

09/03/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

43-0411-30061



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

<http://www.blm.gov/ut/st/en.html>

IN REPLY REFER TO:

3160

UTU80800X

(UT922100)

JUN 26 2012

RECEIVED

JUN 28 2012

DIV OF OIL, GAS & MINING

*Twist Cyn Fed 21-1A
213 IE 21*

Mr. Richard Moritz
One Riverfront Plaza
55 Campau, N.W.
Grand Rapids, MI 49503-2616

Re: Automatic Contraction
Wolverine Unit
Sanpete & Sevier Counties, Utah

Dear Mr. Moritz:

Your letter of June 20, 2012, describes the lands automatically eliminated effective March 16, 2012, from the Wolverine Unit Area, Sanpete & Sevier Counties, Utah, pursuant to Section 2(e) of the unit agreement and requests our concurrence. The lands you have described contain 68,062.645 acres, more or less, and contain all legal subdivisions, no parts of which are in the 7th Revision of the Navajo Participating Area "A" and the Initial Navajo 1 Formation - Carbon Sequestration a/k/a Providence Participating Area. As a result of the automatic elimination, the unit is reduced to 2,080.92 acres.

The following Federal Leases are entirely eliminated from the unit area.

UTU 73155	UTU 74851	UTU 78183	UTU 82687
UTU 73157	UTU 74852	UTU 80587	UTU 82690
UTU 73158	UTU 74853	UTU 80906	UTU 80951
UTU 73160	UTU 74854	UTU 80908	
UTU 73529	UTU 76453	UTU 80909	
UTU 73530	UTU 76454	UTU 80910	
UTU 74370	UTU 76455	UTU 80911	
UTU 74850	UTU 76456	UTU 80955	

The following Federal Leases are partially eliminated from the unit area.

UTU 73156	UTU 73528	UTU 80907
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