API Well Number: 43039500050000

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

FORM 3

AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Moroni 11M-1107

2. TYPE OF WORK
DRILL NEW WELL ■ REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
WILDCAT

4. TYPE OF WELL
Oil Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
SKYLINE OPERATING COMPANY, LLC

7. OPERATOR PHONE
807 376-1232

8. ADDRESS OF OPERATOR
1517 Grove Drive, Alpine , UT, 84004

9. OPERATOR E-MAIL
jasonrusson@gmail.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
Patented

11. MINERAL OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ■

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ■

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
D&D HARVEY SANPETE, LLC

14. SURFACE OWNER PHONE (if box 12 = 'fee')
801-372-2515

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
2806 N 1450 W, ,

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ■

19. SLANT
VERTICAL ○ DIRECTIONAL ○ HORIZONTAL ■

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	700 FSL 661 FWL	SWSW	11	15.0 S	3.0 E	S
Top of Uppermost Producing Zone	738 FSL 1036 FWL	SWSW	11	15.0 S	3.0 E	S
At Total Depth	1061 FSL 660 FEL	SESE	11	15.0 S	3.0 E	S

21. COUNTY
SANPETE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
661

23. NUMBER OF ACRES IN DRILLING UNIT
640

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
0

26. PROPOSED DEPTH
MD: 15656 TVD: 12980

27. ELEVATION - GROUND LEVEL
5556

28. BOND NUMBER
31-5-1240

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
65-1854 and 65-3665

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	20	16	0 - 800	65.5	H-40 ST&C	9.0	Varocem	315	2.76	11.5
							Varocem	265	1.68	13.5
I1	14.75	10.75	0 - 4500	45.5	L-80 Casing/Tubing	9.4	Varocem	1475	2.76	11.5
							Varocem	345	1.68	13.5
PROD	9.875	7.625	0 - 8900	33.7	L-80 Casing/Tubing	12.0	OTHER	825	2.44	11.5
			8900 - 11400	33.7	P-110 LT&C	12.0	OTHER	225	1.49	13.5
L1	6.5	4.5	11000 - 15656	15.1	P-110 LT&C	12.0	OTHER	425	1.78	13.5

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☑ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME Don Hamilton **TITLE** Permitting Agent **PHONE** 435-650-3866

SIGNATURE **DATE** 07/14/2014 **EMAIL** starpoint@etv.net

API NUMBER ASSIGNED
43039500050000

APPROVAL
Permit Manager

CONFIDENTIAL

RECEIVED: August 06, 2014

SKYLINE OPERATING COMPANY LLC
Moroni 11M-1107 Drill Plan
Horizontal – Tununk Well
July 15, 2014

Summary:
The Moroni 11M-1107 well will have a vertical pilot hole that will TD at 11,700' TVD. The vertical well will be plugged back to drill a horizontal well in the Tununk formation (See 4b for details). KOP is 11,134' TVD and an 6-1/2" curve will be drilled to EOB at 11,835' MD, 11,673' TVD. A lateral will be drilled with a 6-1/2" bit to TD at 15,656' MD, 12,980' TVD. 4-1/2" liner will be cemented in place with sliding sleeves will be run in the lateral for completion.

Surface Location: SWSW, Section 11, T15S, R3E, SLB&M
700' FSL 661' FWL
Sanpete County, Utah

Bottomhole Location: SESE, Section 11, T15S, R3E, SLB&M
1061' FSL 660' FEL
Sanpete County, Utah

CONFIDENTIAL

DRILLING PROGRAM

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Ground Level 5,555' Estimated KB 5,568' (13')

Formation	MD	Lithology	Hazard
GREEN RIVER	SURFACE		
FLAGSTAFF	1,995	LS, SH, SS	
NORTH HORN	2,374	SS, SLTST, SH	
PRICE RIVER	3,169	SS, SLTST, SH	
CASTLEGATE	6,659	SS, SLTST, SH	
BLACKHAWK	6,856	SS, SLTST, SH	
STAR POINT	7,651	SS, SLTST, SH	
EMERY	8,541	SS, SLTST, SH	
BLUE GATE	8,944	SLTST, SH	
FERRON	10,444	SS, SH, COAL	
TUNUNK	11,311	SLTST, SH	
DAKOTA	11,831	SS	

2. DIRECTIONAL PLANS

KOP:	11,135' MD, 11,135' TVD
BUILD RATE - AZIMUTH:	10°/100', 84.24° Azimuth
END OF BUILD:	11,835' MD, 11,673' TVD at 70° Inc and 84.24° Azimuth
TD LATERAL:	15,656' MD, 12,980' TVD at 70° Inc and 84.24° Azimuth
BH LOCATION:	660' FNL & 1,061' FWL Sec 11 T15S R3E

See attached Directional Proposal Listings for more details.

RECEIVED: July 17, 2014

3. PRESSURE CONTROL EQUIPMENT

A. 14-3/4" Hole Section:

Type: 16" 5,000 psi annular preventer with 5,000 psi Casing head.

9-7/8" Hole Section to TD:

Type: 11" 10,000 psi double gate hydraulic BOP with 11" 5,000 psi annular preventer with 10,000 psi Casing head and 10,000 psi Tubing head.

B. Testing Procedure:

The annular preventer will be pressure tested to 50% of stack rated working pressure for ten (10) minutes or until provisions of test are met, whichever is longer. The BOP, choke manifold, and related equipment will be pressure tested to approved BOP stack working pressure (if isolated from surface casing by a test plug) or to 70% of surface casing internal yield strength (if BOP is not isolated by a test plug). Pressure will be maintained for ten (10) minutes or until the requirements of the test are met, whichever is longer. At a minimum, the Annular and Blow-Out Preventer pressure tests will be performed:

1. When the BOPE is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

Annular will be function tested weekly, and pipe & blind rams activated each trip, but not more than once per day. All BOP drills & tests will be recorded in IADC driller's log.

C. Choke Manifold Equipment:

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

D. Accumulator:

Accumulator will have sufficient capacity to open hydraulically-controlled choke line valve (if so equipped), close all rams plus annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double accumulator capacity and the fluid level will be maintained at manufacturer's recommendations. Accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack.

E. Miscellaneous Information:

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

A flare line will be installed after the choke manifold with the discharge point of the flare line to a separate pit located at least 125 feet away from the wellbore and any existing production facilities.

A volume monitoring system with alarms will be used to monitor pit gains/losses along with visual backup.

CONFIDENTIAL

RECEIVED: July 17, 2014

4. PROPOSED CASING PROGRAM

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Coupling OD	Burst (psi)	Collapse (psi)	Tension (Body/Joint) (klbs)	Depth Set (md)
20"	16"	65.50	H-40	STC	17.0"	1,640	630	736/439	0 – 800'
14-3/4"	10-3/4"	45.5	L80HC	STC	11.75"	5,210	2,940	1,040/692	0 – 4,500'
9-7/8"	7-5/8"	33.7	L80HC	LTC	8.5"	7,890	7,460	778/664	0 – 8,900'
9-7/8"	7-5/8"	33.7	P110HC	LTC	8.5"	10,850	9,110	1,069/901	8,900'-11,400'
6.5"	4-1/2"	15.1	P110HC	LTC	5"	14,420	15,130	485/406	11,000' – 15,656'

16" surface casing will have centralizers as follows:

1. Install a bowspring centralizer at the first and second collars above the guide shoe.
2. Install one bowspring centralizer every third joint above the second collar.
3. Centralizer and basket placed 120' below the surface (or at the bottom of the third joint below the surface).
4. Centralizer and basket placed 80' below the surface (or at the bottom of the second joint below the surface).

10-3/4" intermediate casing will have centralizers as follows:

1. Install a bowspring centralizer at the first and second collars above the guide shoe.
2. After that centralize every third joint to surface with single bow spring centralizers

7-5/8" production casing will have centralizers as follows:

1. Install a bowspring centralizer at the first and second collars above the guide shoe.
2. After that centralize every third joint to 4,000' with single bow spring centralizers.

4-1/2" Liner to be run with Frac Sleeves

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

CONFIDENTIAL

B. Casing Design Parameters:

Surface Casing

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
0' – 800'	16"	65.5 lb/ft	H-40	1,640/2.87	630/1.68	439/9.79

a. based on frac gradient at shoe of 14.0 ppg
b. based on full evacuation with 9.0 ppg fluid on backside
c. based on casing string weight in 9.0 ppg mud
String Weight in 9.0 ppg mud ≈ 44,855 lbs

Intermediate Casing

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
0' – 4,500'	10-3/4"	45.5 lb/ft	L80HC	5,210/1.25	2,940/1.34	692/3.95

a. based on frac gradient at shoe of 14.0 ppg
b. based on full evacuation with 9.4 ppg pore pressure on backside
c. based on casing string weight in 9.4 ppg mud
String Weight in 9.4 ppg mud ≈ 175,366 lbs.

RECEIVED: July 17, 2014

Production Casing

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
0'-8,900'	7-5/8"	33.7 lb/ft	L-80HC	7,890/2.57	7,460/1.34	664/2.12
8,900'-11,400'	7-5/8"	33.7 lb/ft	P110HC	10,850/9.97	9,110/1.28	901/13.09

a. based on using frac string(7-5/8" will not see frac pressure).
b. based on full evacuation with 9.4 ppg pore pressure on backside
c. based on casing string weight in 9.4 ppg mud
String Weight in 12.0 ppg mud ≈ 313,796 lbs.

Production Liner

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
11,000'-15,656'	4-1/2"	15.1 lb/ft	P-110	14,420/1.2	14,340/2.09	406/7.07

a. based on 12,000 psi frac pressure.
b. based on full evacuation with 9.4 ppg pore pressure on backside
c. based on casing string weight in 9.4 ppg mud
String Weight in 12.0 ppg mud ≈ 57,425 lbs.

CONFIDENTIAL

5. PROPOSED CEMENTING PROGRAM

Surface Casing – 16" Casing: TOC Surface, (100% Excess)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
16"	Lead	550'	Lead Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	315	100	11.5	2.76
16"	Tail	250'	Tail Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	265	100	13.5	1.68

A cement top job is required if cement fallback is greater than 10' below ground level.

Intermediate Casing – 10-3/4" Casing: TOC Surface, (100%)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
10-3/4"	Lead	4,000'	Lead Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	1475	100	11.5	2.76
10-3/4"	Tail	500'	Tail Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	345	100	13.5	1.68

Cement volumes for the 10-3/4" Intermediate Casing will be calculated to provide a top of cement to Surface.

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

RECEIVED: July 17, 2014

Production Casing – 7-5/8" Casing: TOC @4,000', (50% Excess)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
7-5/8"	Lead	6,400'	Lead Cement ECONOCEM ™ SYSTEM; -1lbm Granulite TR 1/4 - 0.50 lbm/sk Poly-E-Flake (Lost Circulation Additive) -3 lbm Kol-Seal	825	50	11.5	2.44
7-5/8"	Tail	1,000'	Tail Cement EXPANADCEM™ SYSTEM; -1lbm Granulite TR 1/4 - 0.50 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.6 % HR-5 (Retarder)	225	50	13.5	1.49

Cement volumes for the 7-5/8" Production Casing will be calculated to provide a top of cement to 4,000'.

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

Production Casing – 4-1/2" Liner: TOC @11,000', (35% Excess)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
4-1/2"	Tail	4,656'	Tail Cement EXPANADCEM™ SYSTEM; -20% SS-200 - 0.25 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive) -0.50% D-AIR 5000 - 0.8 % HR-601	425	35	13.5	1.78

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 11,000'.

CONFIDENTIAL

4b. PLUGBACK DETAIL

The pilot hole will be drilled and cores cut to a depth of 11,700' MD & TVD. The pilothole will be plugged back to a KOP of 11,000' MD & TVD. The cement detail is as follows:

Stage 1

SPACER: (900 ft fill) 900 ft * 0.2496 ft3/ft	= 224.58 ft3 =
* 0 % Total Spacer	224.58 ft3 =
	29.1 bbl
CEMENT: (400 ft fill) 4256 ft * 0.12 ft3/ft	= 689.42 ft3 =
* 35 % 400 ft * 0.2304 ft3/ft * 35 %	124.44 ft3 =
HalCem	813.86 ft3 =
	21.1 bbl
	= 78.14 sack
Total Tail	
Total Pipe Capacity:	
4256 ft * 0.0798 ft3/ft	= 339.8 ft3
11000 ft * 0.0608 ft3/ft	= 669.29 ft3
400 ft * 0.0798 ft3/ft	= 31.94 ft3 =
	185.4 bbl

RECEIVED: July 17, 2014

Fluid 1: Rheologically Enhanced Spacer		
Tuned Spacer III	Fluid Density:	12.5 lbm/gal
34.60 gal/bbl FRESH WATER	Volume Ahead:	29.1 bbl
0.1250 gal/bbl D-AIR 3000L		
204.30 lbm/bbl Barite		
Fluid 2: Tail Slurry		
HALCEM (TM) SYSTEM	Fluid Weight:	15.8 lbm/gal
35 % SS-200	Volume:	21.1 bbl
0.50 % SCR-100	Slurry Yield:	1.516 ft3/sack
6.21 Gal FRESH WATER	Total Mixing Fluid:	6.21 Gal/sack
	Top Of Fluid:	11300 ft
	Calculated Fill:	400 ft
	Calculated sack:	78.03 sack
	Proposed sack:	80 sack
Fluid 3: Rheologically Enhanced Spacer		
Tuned Spacer III	Fluid Density:	12.5 lbm/gal
34.60 gal/bbl FRESH WATER	Volume Behind:	10.9 bbl
0.1250 gal/bbl D-AIR 3000L		
204.30 lbm/bbl Barite		

CONFIDENTIAL

6. MUD PROGRAM

Depth (MD)	Mud System	MW	PV	YP	FL
0 -800'	Water, Gel/Lime Sweeps	8.4 – 9.0	2 - 20	2 - 18	NC
800' – 3,000'	3% KCL Water/Polymer	8.4 – 9.4	10 - 28	6 - 18	6 - 10
3,000' – 4,500'	3% KCL Water/Polymer	8.4 – 9.4	14 - 32	10 - 22	4 - 10
4,500' – 11,400'	3% KCL Water/Polymer	9.4 – 12.0	14 – 32	10 – 22	4 – 10
11,134-15,656'	3% KCL Water/Polymer	9.4 – 12.0	14 – 32	10 – 22	8 – 12

RECEIVED: July 17, 2014

7. EVALUATION PROGRAM

Cores: Core of Tununk from 11,400' – 11,700'

DST: None planned

Surveys: Deviation surveys every 90' to TD in the surface, intermediate and production holes.

Mud Logger:
Samples: 30' samples surface to TD

Open Hole Logging Program: Triple Combo and Sonic 11,400' to 4,500'
Triple Combo, Sonic Scanner, and FMI 11,700' to 11,400'

8. ABNORMAL CONDITIONS

No abnormal pressures are anticipated. No H_2S gas is anticipated.

Anticipated bottom hole pressure is 8,100 psi (0.62 psi/ft) at 12,980' TVD in the Tununk and the maximum anticipated surface pressure equals approximately 5,244 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

9. ANTICIPATED STARTING DATES

A. Anticipated Starting Dates:

Dirt work startup: August 2014

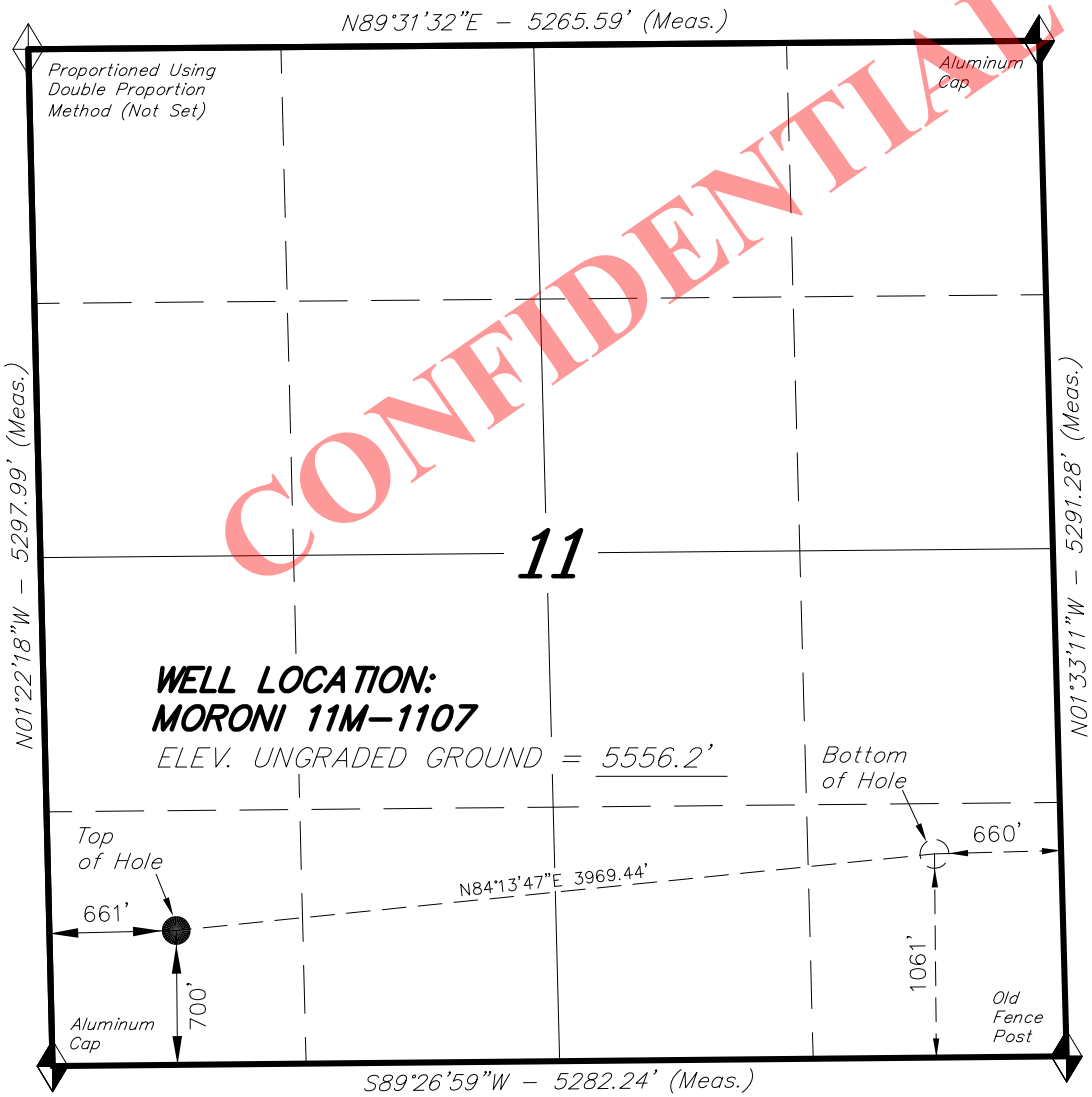
Spud: September 2014

Duration: 45 – 55 days

CONFIDENTIAL

RECEIVED: July 17, 2014

T15S, R3E, S.L.B.&M.

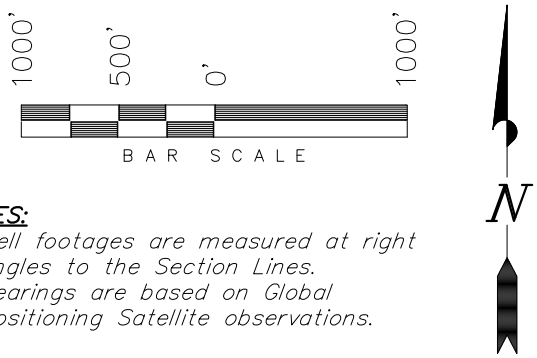


CONFIDENTIAL

SKYLINE OPERATING COMPANY LLC

WELL LOCATION, MORONI 11M–1107, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 11, T15S, R3E, S.L.B.&M. SANPETE COUNTY, UTAH.

TARGET BOTTOM HOLE, MORONI 11M–1107, LOCATED AS SHOWN IN THE SE 1/4 SE 1/4 OF SECTION 11, T15S, R3E, S.L.B.&M. SANPETE COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE 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.

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

REGISTERED LAND SURVEYOR
No. 189377
07-01-14
STACY W. STEWART
STATE OF UTAH

= SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 39°31'53.80" LONG. 111°33'50.61" (Spike) NAVD 88 Elev. 5644.8'

NAD 83 (SURFACE LOCATION)	
LATITUDE = 39°31'19.67"	(39.522131°)
LONGITUDE = 111°33'42.17"	(111.561715°)
NAD 27 (SURFACE LOCATION)	
LATITUDE = 39°31'19.81"	(39.522169°)
LONGITUDE = 111°33'39.48"	(111.560966°)
NAD 83 (BOTTOM HOLE LOCATION)	
LATITUDE = 39°31'23.60"	(39.523223°)
LONGITUDE = 111°32'51.79"	(111.547719°)
NAD 27 (BOTTOM HOLE LOCATION)	
LATITUDE = 39°31'23.74"	(39.523261°)
LONGITUDE = 111°32'49.09"	(111.546970°)

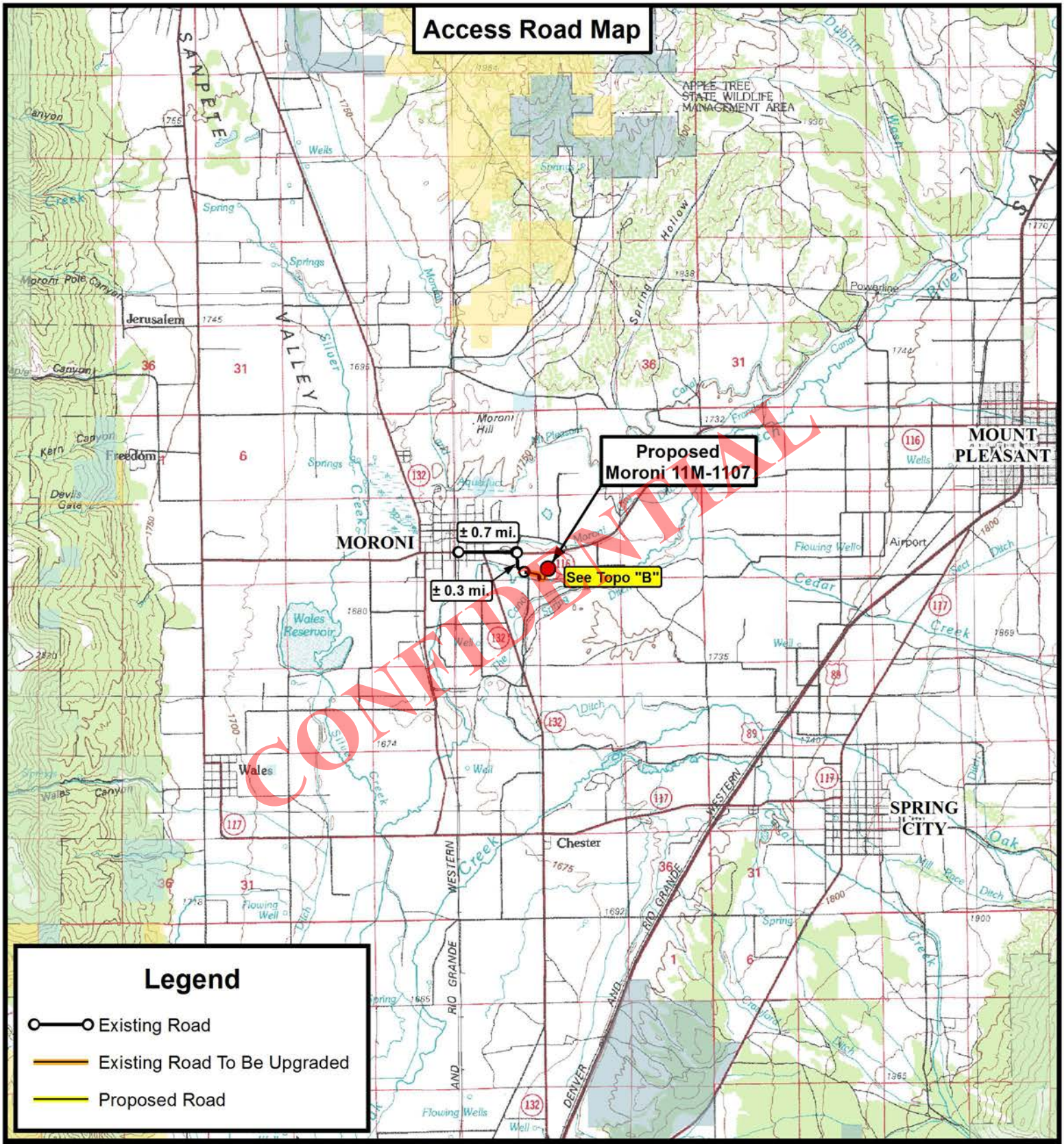
TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781–2501

DATE SURVEYED: 06–08–14	SURVEYED BY: S.V.	SHEET
DATE DRAWN: 07–01–14	DRAWN BY: M.W.	1
REVISED:	SCALE: 1" = 1000'	

RECEIVED: July 14, 2014

API Well Number: 43039500050000



CONFIDENTIAL

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

SKYLINE OPERATING COMPANY LLC

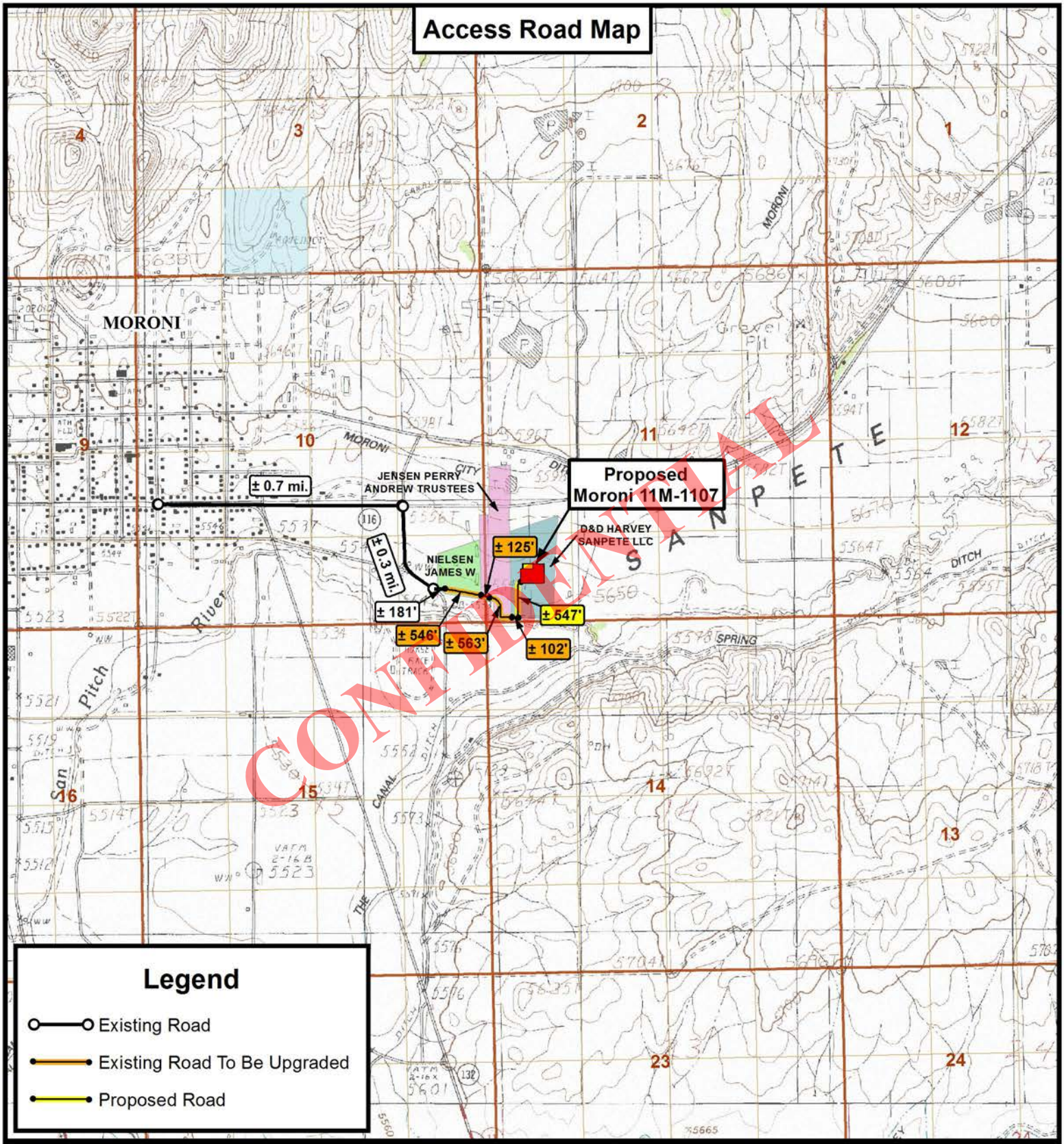
Proposed Moroni 11M-1107
Sec. 11, T15S, R3E, S.L.B.&M.
Sanpete County, UT.

DRAWN BY:	D.C.R.	REVISED:
DATE:	06-27-14	
SCALE:	1:100,000	

TOPOGRAPHIC MAP

SHEET A

API Well Number: 43039500050000



THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

SKYLINE OPERATING COMPANY LLC

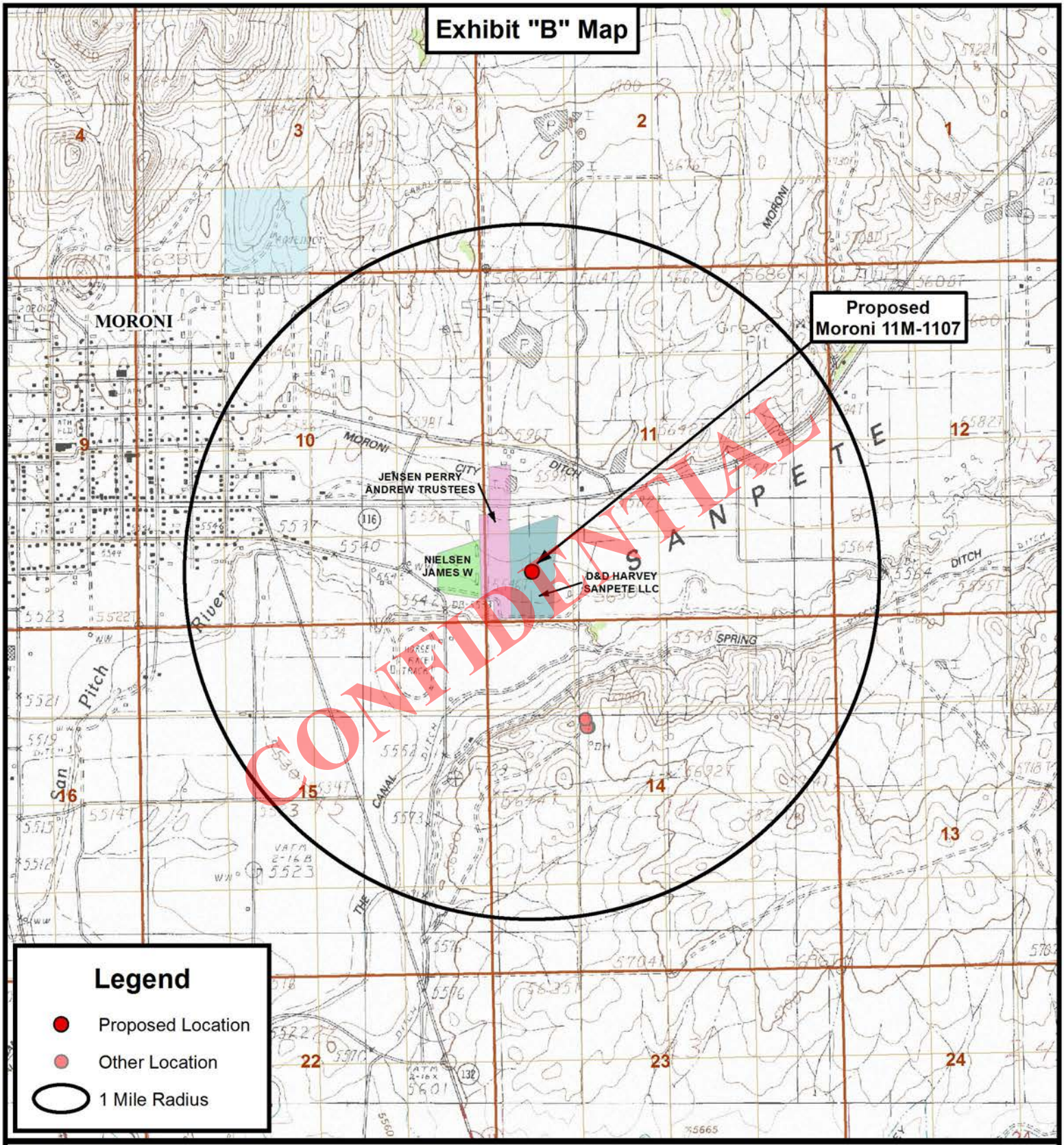
Proposed Moroni 11M-1107
Sec. 11, T15S, R3E, S.L.B.&M.
Sanpete County, UT.

DRAWN BY:	D.C.R.	REVISED:
DATE:	06-27-14	
SCALE:	1 " = 2,000 '	

TOPOGRAPHIC MAP

SHEET B

API Well Number: 43039500050000



CONFIDENTIAL

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

SKYLINE OPERATING COMPANY LLC

Proposed Moroni 11M-1107
Sec. 11, T15S, R3E, S.L.B.&M.
Sanpete County, UT.

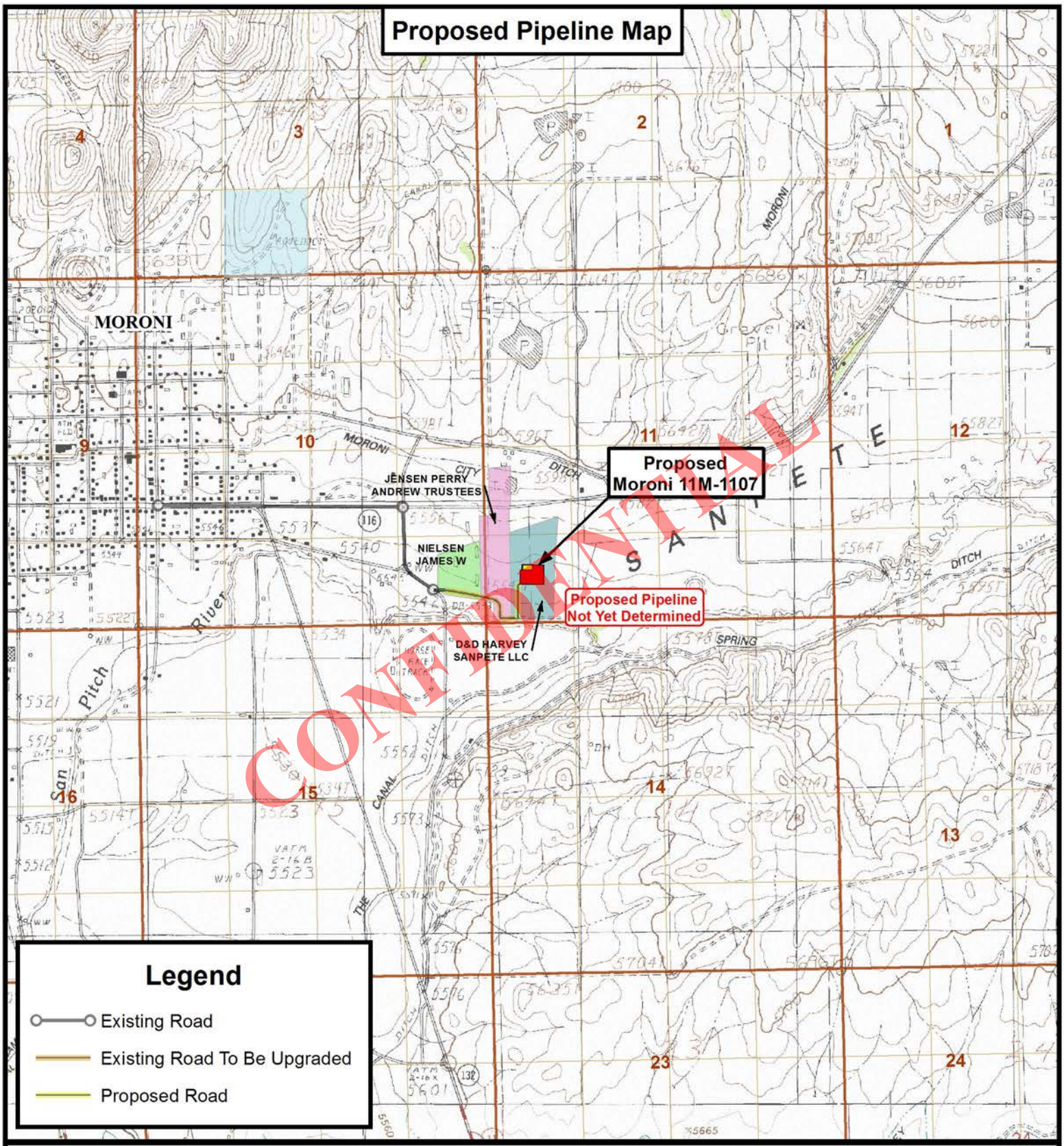
DRAWN BY:	D.C.R.	REVISED:
DATE:	06-27-14	
SCALE:	1 " = 2,000 '	

TOPOGRAPHIC MAP

SHEET C

API Well Number: 43039500050000

Proposed Pipeline Map



THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

SKYLINE OPERATING COMPANY LLC

Proposed Moroni 11M-1107
Sec. 11, T15S, R3E, S.L.B.&M.
Sanpete County, UT.

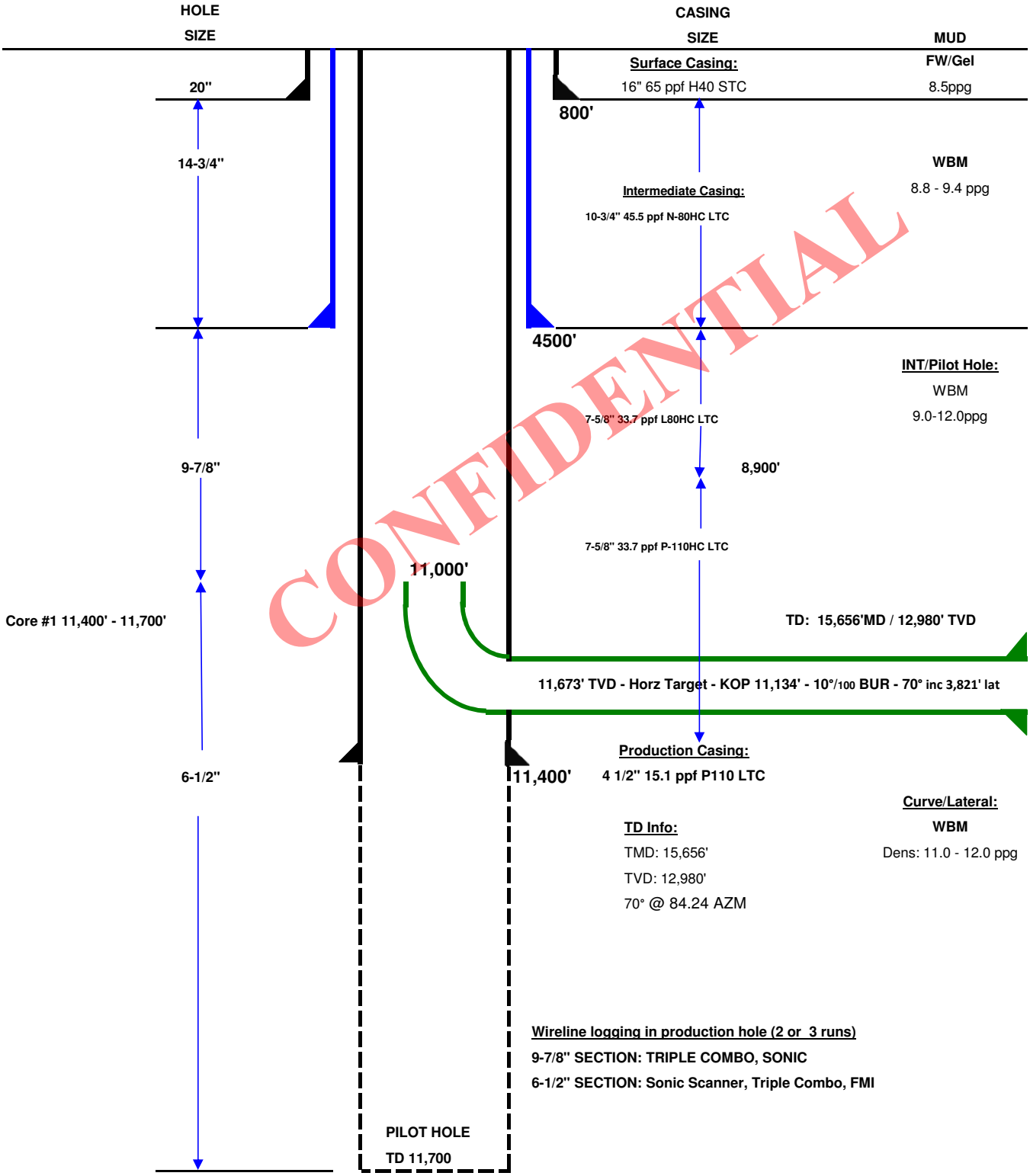
DRAWN BY:	D.C.R.	REVISED:
DATE:	06-27-14	
SCALE:	1 " = 2,000 '	

TOPOGRAPHIC MAP

SHEET D

API Well Number: 43039500050000

Company:	**SKYLINE OPERATING COMPANY LLC**	**Date:**	July 11, 2014
Well:	**MORONI 11M-1107**	**MD/TVD**	Pilot Hole TD 11,700'. Horizontal 15,656' MD, 12,980' TVD
County, State:	Sanpete Co., UT	**AFE #:**	14-1341
Surface Location:	SWSW, Section 11, T15S, R3E	**BHL:**	SESE, Section 11, T15S, R3E
Objective Zone:	TUNUNK	**GR:**	5,555'
Rig:	TBD	**KB**	5,568'



CONFIDENTIAL

RECEIVED: July 14, 2014

API Well Number: 43039500050000

Skyline Operating Company LLC

Company: Skyline Operating Company LLC
Site: Moroni 11M
Well: 1107
Project: Sanpete County, Utah (NAD 83)
Rig Name: RKB 13'

MS Energy Services
WWW.MSENERGYSERVICES.COM

PILOT HOLE ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
11831.00	0.00	0.00	11831.00	0.00	0.00	0.00	0.00	Pilot Hole PBHL - 11831.00' MD

ANNOTATIONS

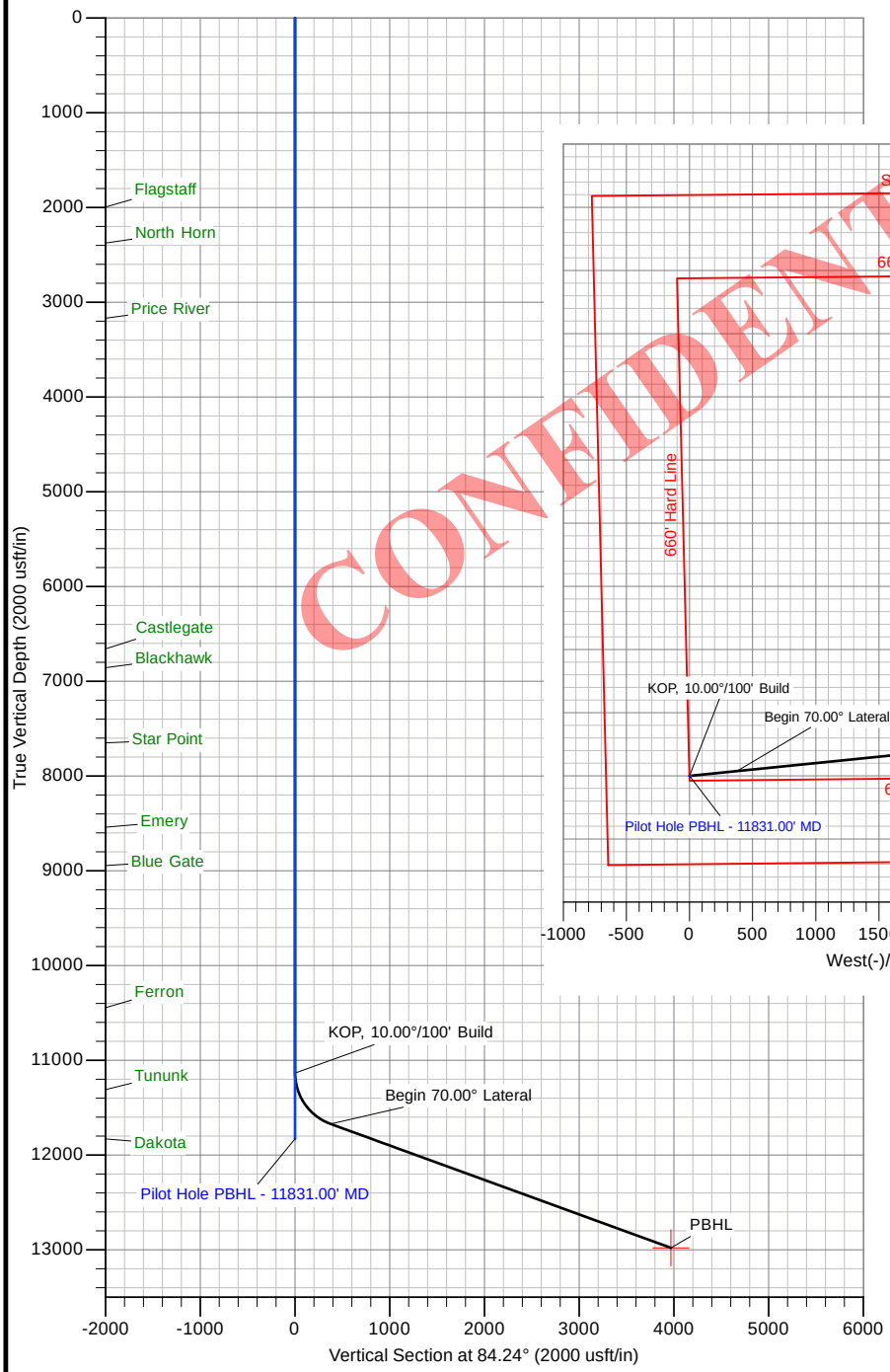
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
11134.81	0.00	0.00	11134.81	0.00	0.00	0.00	0.00	KOP, 10.00°/100' Build
11834.81	70.00	84.24	11673.21	37.82	375.09	376.99	376.99	Begin 70.00° Lateral
15656.25	70.00	84.24	12980.22	398.06	3947.95	3967.97	3967.97	PBHL

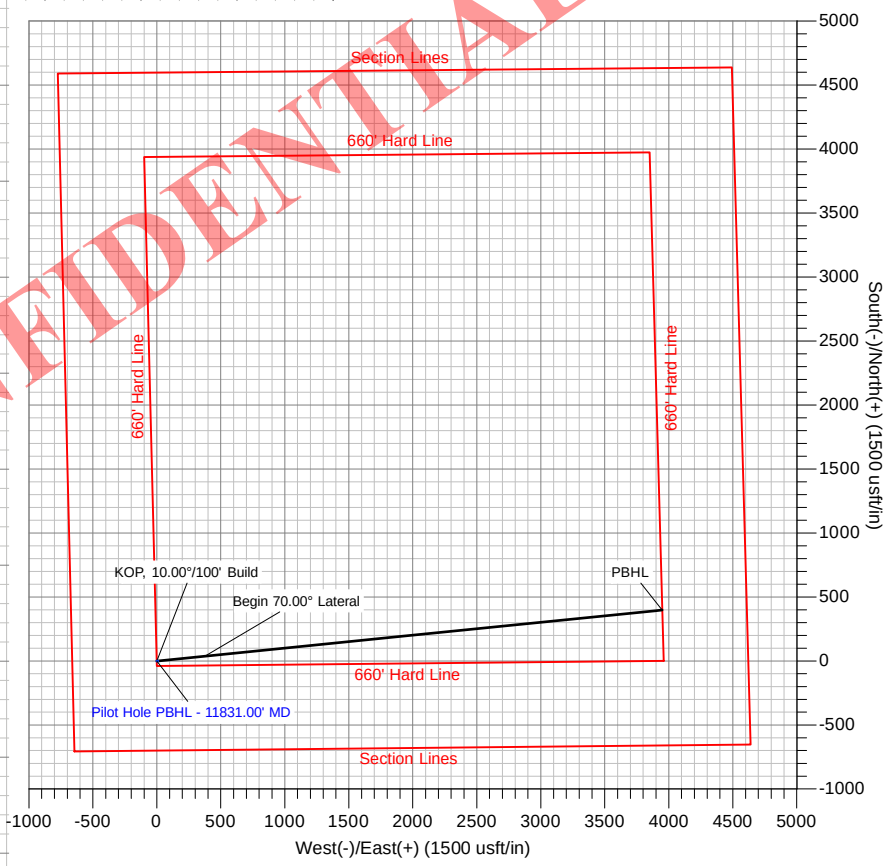
T M
Azimuths to True North
Magnetic North: 11.42°

Magnetic Field
Strength: 51476.6snT
Dip Angle: 64.99°
Date: 7/3/2014
Model: WMM_2010

US State Plane 1983
Utah Central Zone

Created By: TWG
Date: 8:31, July 11 2014
Plan: Pilot Hole #1





CONFIDENTIAL

The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented.
Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer.
MS Energy is not responsible for the accuracy of this schematic or the information contained herein.

RECEIVED: July 14, 2014

Skyline Operating Company LLC

Sanpete County, Utah (NAD 83)
Moroni 11M
1107

Wellbore #1

Plan: Design #2

Standard Planning Report

11 July, 2014

CONFIDENTIAL

MS Energy Services
WWW.MSENERGYSERVICES.COM

RECEIVED: July 14, 2014

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Skyline Operating Company LLC	**TVD Reference:**	WELL @ 5569.00usft (RKB 13')
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5569.00usft (RKB 13')
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Project Sanpete County, Utah (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Well 1107

Well Position	**+N/-S**	7,068,139.86 usft	**Northing:**	6,994,672.76 usft	**Latitude:**	39° 31' 19.671 N
	+E/-W	1,265,306.66 usft	**Easting:**	1,623,007.99 usft	**Longitude:**	111° 33' 42.174 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	5,556.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	7/3/2014	11.42	64.99	51,477

Design Design #2

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	11,134.81

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	84.24

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
11,134.81	0.00	0.00	11,134.81	0.00	0.00	0.00	0.00	0.00	0.00	
11,834.81	70.00	84.24	11,673.21	37.82	375.09	10.00	10.00	12.03	84.24	
15,656.25	70.00	84.24	12,980.22	398.06	3,947.95	0.00	0.00	0.00	0.00	PBHL v2 - Moroni 1

CONFIDENTIAL

RECEIVED: July 14, 2014

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Skyline Operating Company LLC	**TVD Reference:**	WELL @ 5569.00usft (RKB 13')
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5569.00usft (RKB 13')
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,995.00	0.00	0.00	1,995.00	0.00	0.00	0.00	0.00	0.00	0.00
Flagstaff									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,374.00	0.00	0.00	2,374.00	0.00	0.00	0.00	0.00	0.00	0.00
North Horn									
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,169.00	0.00	0.00	3,169.00	0.00	0.00	0.00	0.00	0.00	0.00
Price River									
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00

CONFIDENTIAL

RECEIVED: July 14, 2014

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Skyline Operating Company LLC	**TVD Reference:**	WELL @ 5569.00usft (RKB 13')
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5569.00usft (RKB 13')
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,659.00	0.00	0.00	6,659.00	0.00	0.00	0.00	0.00	0.00	0.00
Castlegate									
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,856.00	0.00	0.00	6,856.00	0.00	0.00	0.00	0.00	0.00	0.00
Blackhawk									
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,651.00	0.00	0.00	7,651.00	0.00	0.00	0.00	0.00	0.00	0.00
Star Point									
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,541.00	0.00	0.00	8,541.00	0.00	0.00	0.00	0.00	0.00	0.00
Emery									
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,944.00	0.00	0.00	8,944.00	0.00	0.00	0.00	0.00	0.00	0.00
Blue Gate									
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00

CONFIDENTIAL

RECEIVED: July 14, 2014

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Skyline Operating Company LLC	**TVD Reference:**	WELL @ 5569.00usft (RKB 13')
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5569.00usft (RKB 13')
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00
10,444.00	0.00	0.00	10,444.00	0.00	0.00	0.00	0.00	0.00	0.00
Ferron									
10,500.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00	0.00
10,600.00	0.00	0.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00
10,700.00	0.00	0.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00
10,800.00	0.00	0.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.00
10,900.00	0.00	0.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.00
11,000.00	0.00	0.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.00
11,100.00	0.00	0.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.00
11,134.81	0.00	0.00	11,134.81	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 10.00°/100' Build									
11,150.00	1.52	84.24	11,150.00	0.02	0.20	0.20	10.00	10.00	0.00
11,200.00	6.52	84.24	11,199.86	0.37	3.69	3.70	10.00	10.00	0.00
11,250.00	11.52	84.24	11,249.23	1.16	11.48	11.54	10.00	10.00	0.00
11,300.00	16.52	84.24	11,297.72	2.37	23.53	23.65	10.00	10.00	0.00
11,326.04	19.12	84.24	11,322.51	3.17	31.46	31.62	10.00	10.00	0.00
Tununk									
11,350.00	21.52	84.24	11,344.98	4.01	39.74	39.94	10.00	10.00	0.00
11,400.00	26.52	84.24	11,390.63	6.05	59.98	60.28	10.00	10.00	0.00
11,450.00	31.52	84.24	11,434.34	8.48	84.10	84.53	10.00	10.00	0.00
11,500.00	36.52	84.24	11,475.77	11.29	111.93	112.49	10.00	10.00	0.00
11,550.00	41.52	84.24	11,514.61	14.44	143.24	143.96	10.00	10.00	0.00
11,600.00	46.52	84.24	11,550.55	17.93	177.80	178.70	10.00	10.00	0.00
11,650.00	51.52	84.24	11,583.33	21.71	215.34	216.43	10.00	10.00	0.00
11,700.00	56.52	84.24	11,612.70	25.77	255.58	256.88	10.00	10.00	0.00
11,750.00	61.52	84.24	11,638.43	30.07	298.22	299.73	10.00	10.00	0.00
11,800.00	66.52	84.24	11,660.32	34.58	342.93	344.67	10.00	10.00	0.00
11,834.81	70.00	84.24	11,673.21	37.82	375.09	376.99	10.00	10.00	0.00
Begin 70.00° Lateral									
11,900.00	70.00	84.24	11,695.51	43.96	436.04	438.25	0.00	0.00	0.00
12,000.00	70.00	84.24	11,729.71	53.39	529.54	532.22	0.00	0.00	0.00
12,100.00	70.00	84.24	11,763.91	62.82	623.03	626.19	0.00	0.00	0.00
12,200.00	70.00	84.24	11,798.12	72.24	716.53	720.16	0.00	0.00	0.00
12,300.00	70.00	84.24	11,832.32	81.67	810.02	814.13	0.00	0.00	0.00
12,400.00	70.00	84.24	11,866.52	91.10	903.52	908.10	0.00	0.00	0.00
12,500.00	70.00	84.24	11,900.72	100.52	997.01	1,002.07	0.00	0.00	0.00
12,600.00	70.00	84.24	11,934.92	109.95	1,090.51	1,096.04	0.00	0.00	0.00
12,700.00	70.00	84.24	11,969.13	119.38	1,184.00	1,190.01	0.00	0.00	0.00
12,800.00	70.00	84.24	12,003.33	128.80	1,277.50	1,283.98	0.00	0.00	0.00

CONFIDENTIAL

RECEIVED: July 14, 2014

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Skyline Operating Company LLC	**TVD Reference:**	WELL @ 5569.00usft (RKB 13')
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5569.00usft (RKB 13')
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,900.00	70.00	84.24	12,037.53	138.23	1,370.99	1,377.95	0.00	0.00	0.00
13,000.00	70.00	84.24	12,071.73	147.66	1,464.49	1,471.92	0.00	0.00	0.00
13,100.00	70.00	84.24	12,105.94	157.08	1,557.99	1,565.88	0.00	0.00	0.00
13,200.00	70.00	84.24	12,140.14	166.51	1,651.48	1,659.85	0.00	0.00	0.00
13,300.00	70.00	84.24	12,174.34	175.94	1,744.98	1,753.82	0.00	0.00	0.00
13,400.00	70.00	84.24	12,208.54	185.37	1,838.47	1,847.79	0.00	0.00	0.00
13,500.00	70.00	84.24	12,242.74	194.79	1,931.97	1,941.76	0.00	0.00	0.00
13,600.00	70.00	84.24	12,276.95	204.22	2,025.46	2,035.73	0.00	0.00	0.00
13,700.00	70.00	84.24	12,311.15	213.65	2,118.96	2,129.70	0.00	0.00	0.00
13,800.00	70.00	84.24	12,345.35	223.07	2,212.45	2,223.67	0.00	0.00	0.00
13,900.00	70.00	84.24	12,379.55	232.50	2,305.95	2,317.64	0.00	0.00	0.00
14,000.00	70.00	84.24	12,413.75	241.93	2,399.44	2,411.61	0.00	0.00	0.00
14,100.00	70.00	84.24	12,447.96	251.35	2,492.94	2,505.58	0.00	0.00	0.00
14,200.00	70.00	84.24	12,482.16	260.78	2,586.43	2,599.55	0.00	0.00	0.00
14,300.00	70.00	84.24	12,516.36	270.21	2,679.93	2,693.52	0.00	0.00	0.00
14,400.00	70.00	84.24	12,550.56	279.63	2,773.42	2,787.48	0.00	0.00	0.00
14,500.00	70.00	84.24	12,584.76	289.06	2,866.92	2,881.45	0.00	0.00	0.00
14,600.00	70.00	84.24	12,618.97	298.49	2,960.41	2,975.42	0.00	0.00	0.00
14,700.00	70.00	84.24	12,653.17	307.91	3,053.91	3,069.39	0.00	0.00	0.00
14,800.00	70.00	84.24	12,687.37	317.34	3,147.40	3,163.36	0.00	0.00	0.00
14,900.00	70.00	84.24	12,721.57	326.77	3,240.90	3,257.33	0.00	0.00	0.00
15,000.00	70.00	84.24	12,755.77	336.19	3,334.39	3,351.30	0.00	0.00	0.00
15,100.00	70.00	84.24	12,789.98	345.62	3,427.89	3,445.27	0.00	0.00	0.00
15,200.00	70.00	84.24	12,824.18	355.05	3,521.39	3,539.24	0.00	0.00	0.00
15,300.00	70.00	84.24	12,858.38	364.47	3,614.88	3,633.21	0.00	0.00	0.00
15,400.00	70.00	84.24	12,892.58	373.90	3,708.38	3,727.18	0.00	0.00	0.00
15,500.00	70.00	84.24	12,926.78	383.33	3,801.87	3,821.15	0.00	0.00	0.00
15,600.00	70.00	84.24	12,960.99	392.75	3,895.37	3,915.12	0.00	0.00	0.00
15,656.25	70.00	84.24	12,980.22	398.06	3,947.95	3,967.97	0.00	0.00	0.00
PBHL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL v2 - Moroni 11M - plan hits target center - Point	0.00	0.00	12,980.22	398.06	3,947.95	6,995,068.10	1,626,956.21	39° 31' 23.603 N	111° 32' 51.788 W

CONFIDENTIAL

RECEIVED: July 14, 2014

Planning Report

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Skyline Operating Company LLC	**TVD Reference:**	WELL @ 5569.00usft (RKB 13')
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5569.00usft (RKB 13')
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,995.00	1,995.00	Flagstaff		20.00	84.24
2,374.00	2,374.00	North Horn		20.00	84.24
3,169.00	3,169.00	Price River		20.00	84.24
6,659.00	6,659.00	Castlegate		20.00	84.24
6,856.00	6,856.00	Blackhawk		20.00	84.24
7,651.00	7,651.00	Star Point		20.00	84.24
8,541.00	8,541.00	Emery		20.00	84.24
8,944.00	8,944.00	Blue Gate		20.00	84.24
10,444.00	10,444.00	Ferron		20.00	84.24
11,326.04	11,322.51	Tununk		20.00	84.24

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,134.81	11,134.81	0.00	0.00	KOP, 10.00°/100' Build
11,834.81	11,673.21	37.82	375.09	Begin 70.00° Lateral
15,656.25	12,980.22	398.06	3,947.95	PBHL

CONFIDENTIAL

RECEIVED: July 14, 2014

AFFIDAVIT AFFIRMING SURFACE USE AGREEMENT

MORONI 11M-1107

Well Name: *MORONI 11M-1107*

Location: 700' FSL & 661' FWL Section 11-T15S-R3E

County: Sanpete County, Utah

API#: Pending

Skyline Operating Company, LLC has obtained a signed Surface Use Agreement for the Moroni 11M-1107 well location. The legal description is as follows:

Township 15 South, Range 3 East

Section 11: SW/4

Dated: July 11, 2014

Scott M. Webb

Skyline Operating Company, LLC

ACKNOWLEDGEMENT

STATE OF COLORADO)

) ss.

COUNTY OF DENVER)

On this 11th day of July, 2014, before me, a Notary Public, personally appeared Scott M. Webb, who being by me duly sworn to sign on behalf of Skyline Operating Company, LLC, and that the foregoing instrument was executed by him on behalf of said company as its free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed by Notarial Seal the day and year first above written.

(SEAL)

FRANK J. OLSEY III
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20104034633
MY COMMISSION EXPIRES 08/31/2018

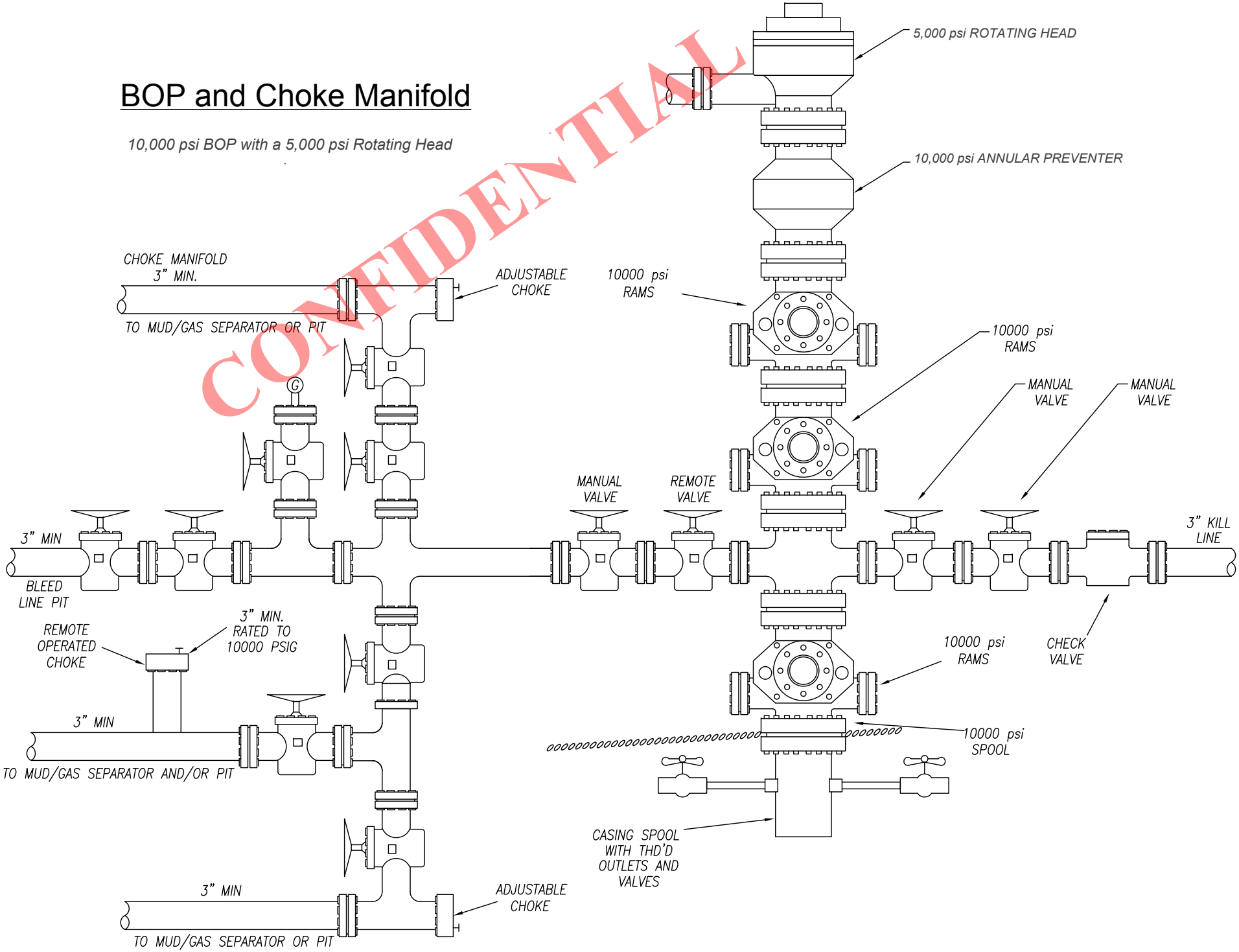
NOTARY PUBLIC

My Commission Expires: 8-31-18

CONFIDENTIAL

BOP and Choke Manifold

10,000 psi BOP with a 5,000 psi Rotating Head



CONFIDENTIAL

RECEIVED: July 14, 2014

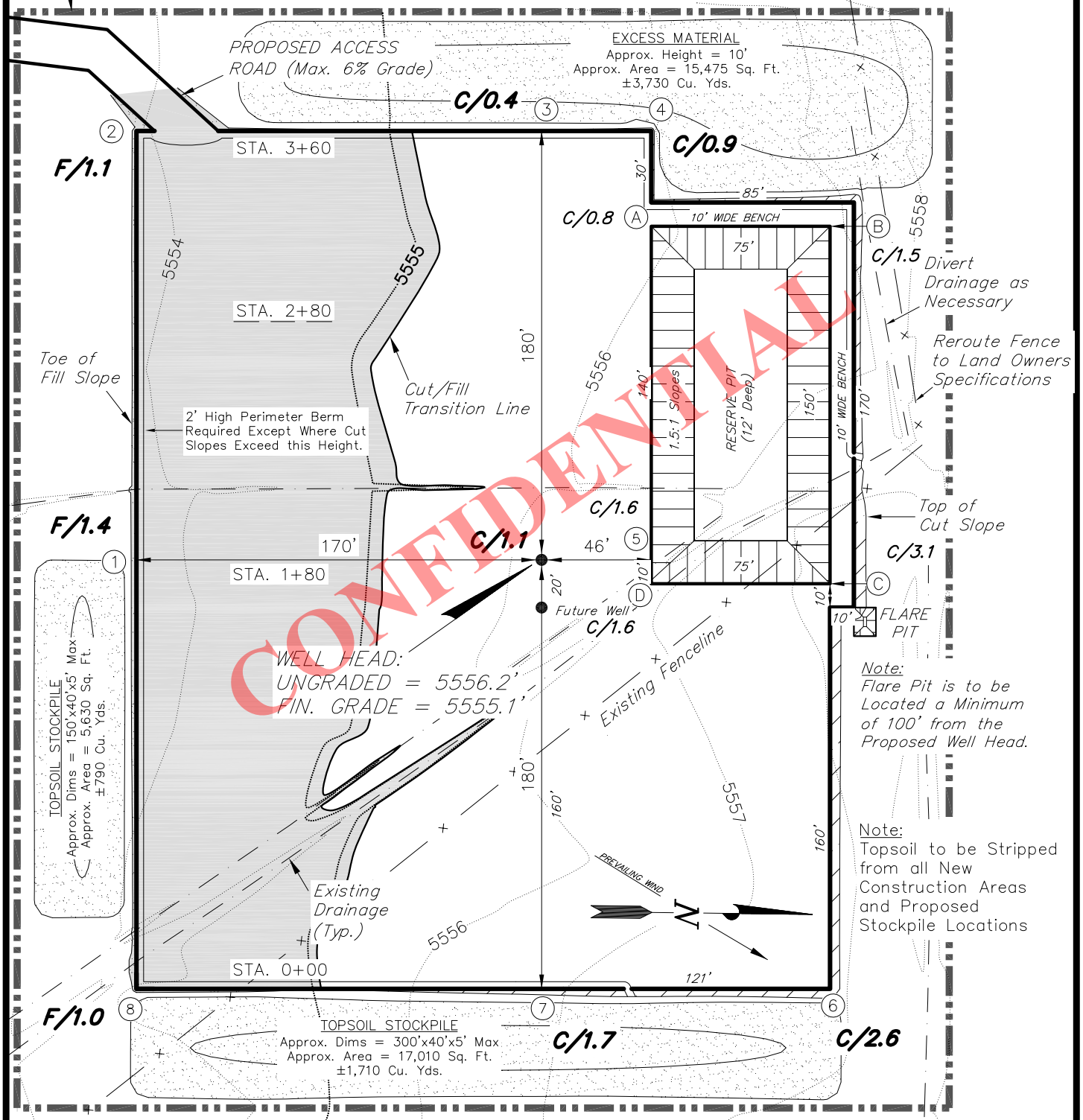
API Well Number: 43039500050000

SKYLINE OPERATING COMPANY LLC

PROPOSED LOCATION LAYOUT

MORONI 11M-1107

Pad Location: SWSW Section 11, T15S, R3E, S.L.B.&M.



NOTE:
The topsoil & excess material areas are calculated as being mounds containing 6,230 cubic yards of dirt (a 10% fluff factor is included). The mound areas are calculated with push slopes of 1.5:1 & fall slopes of 1.5:1.

REFERENCE POINTS

220' SOUTHERLY – 5553.4'
270' SOUTHERLY – 5552.3'
230' EASTERLY – 5557.0'
280' EASTERLY – 5557.0'

SURVEYED BY: S.V.	DATE SURVEYED: 06-08-14	Tri State Land Surveying, Inc. (435) 781-2501 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	SHEET 2
DRAWN BY: M.W.	DATE DRAWN: 06-26-14		
SCALE: 1" = 60'	REVISED:		

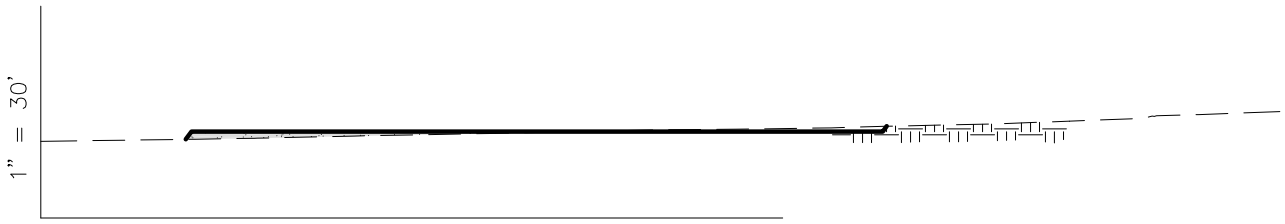
RECEIVED: July 14, 2014

SKYLINE OPERATING COMPANY LLC

CROSS SECTIONS

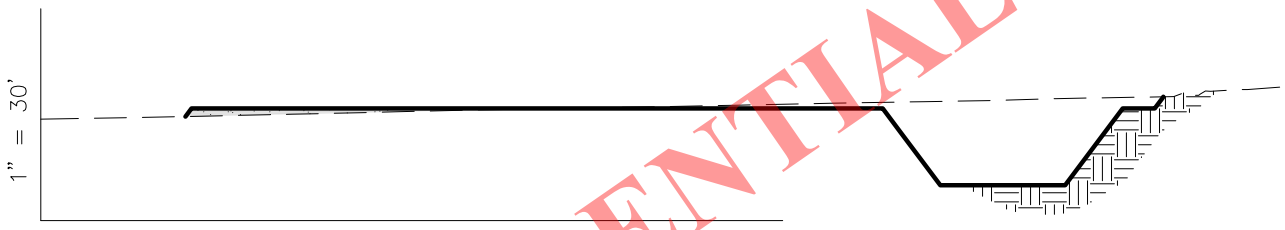
MORONI 11M-1107

Pad Location: SWSW Section 11, T15S, R3E, S.L.B.&M.



1" = 60'

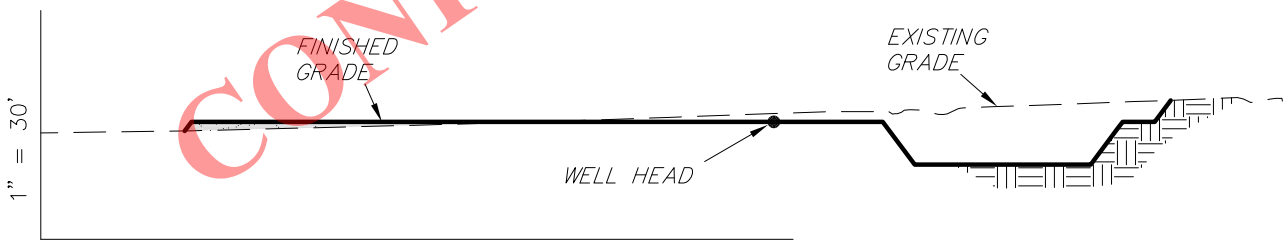
STA. 3+60



1" = 60'

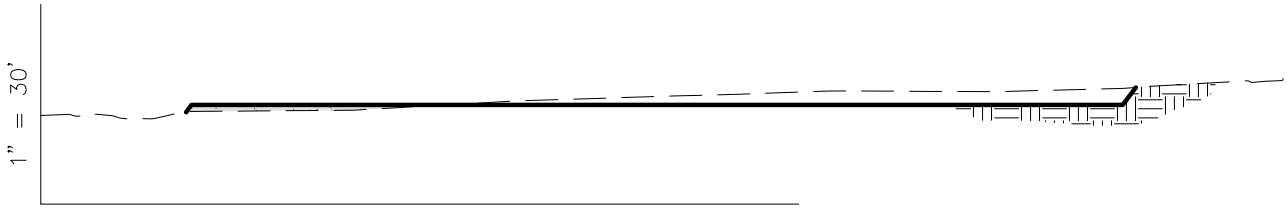
STA. 2+80

CONFIDENTIAL



1" = 60'

STA. 1+80



1" = 60'

STA. 0+00

NOTE:
UNLESS OTHERWISE NOTED ALL CUT/FILL SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	1,850	1,850	Topsoil is not included in Pad Cut Volume	0
PIT	3,390	0		3,390
TOTALS	5,240	1,850	2,270	3,390

SURVEYED BY: S.V.	DATE SURVEYED: 06-08-14	Tri State Land Surveying, Inc. (435) 781-2501 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	SHEET 3
DRAWN BY: M.W.	DATE DRAWN: 06-26-14		
SCALE: 1" = 60'	REVISED:		

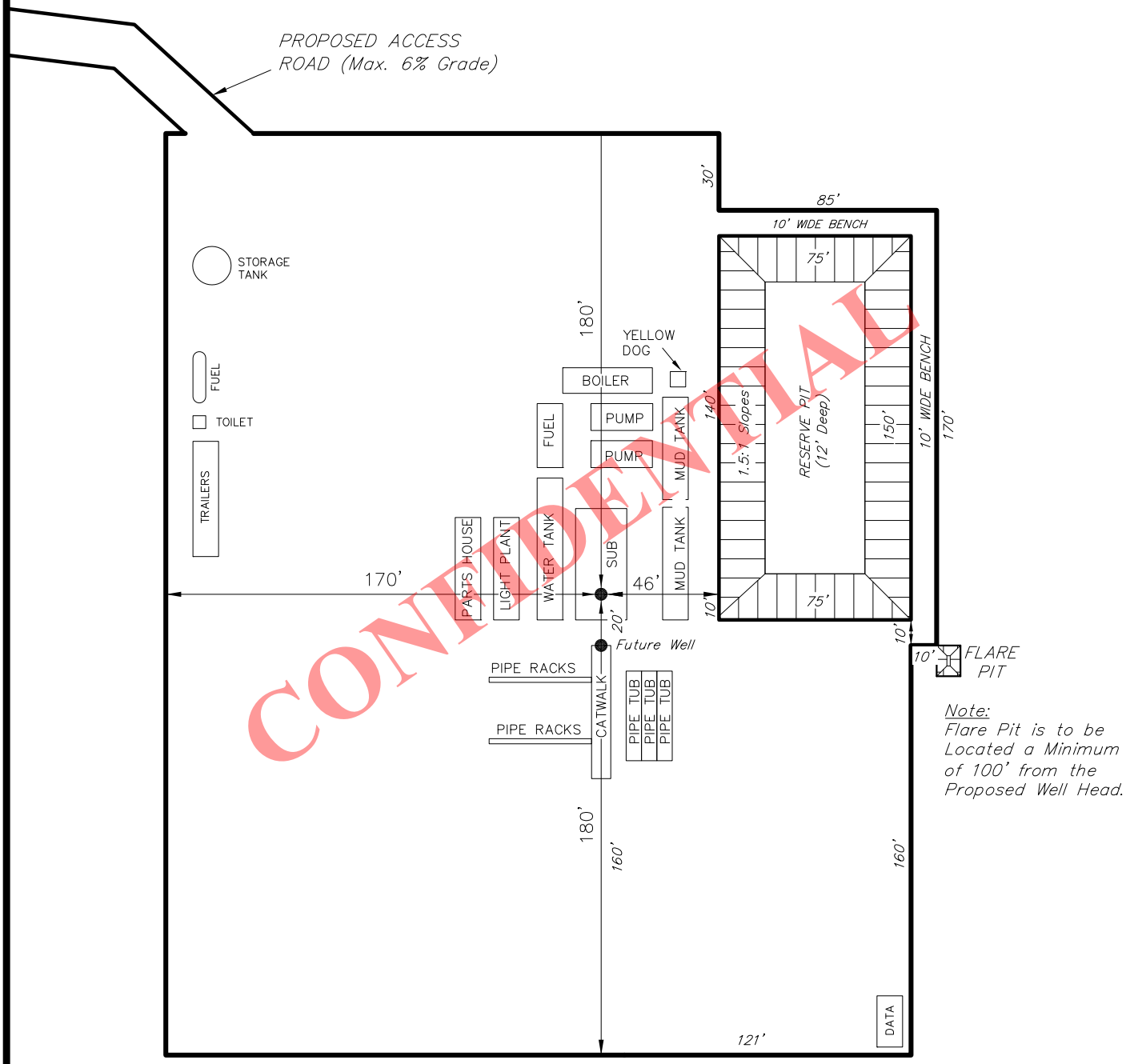
RECEIVED: July 14, 2014

SKYLINE OPERATING COMPANY LLC

TYPICAL RIG LAYOUT

MORONI 11M-1107

Pad Location: SWSW Section 11, T15S, R3E, S.L.B.&M.



Note:
Flare Pit is to be Located a Minimum of 100' from the Proposed Well Head.

SURVEYED BY: S.V.	DATE SURVEYED: 06-08-14	Tri State Land Surveying, Inc. (435) 781-2501 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	SHEET 4
DRAWN BY: M.W.	DATE DRAWN: 06-26-14		
SCALE: 1" = 60'	REVISED:		

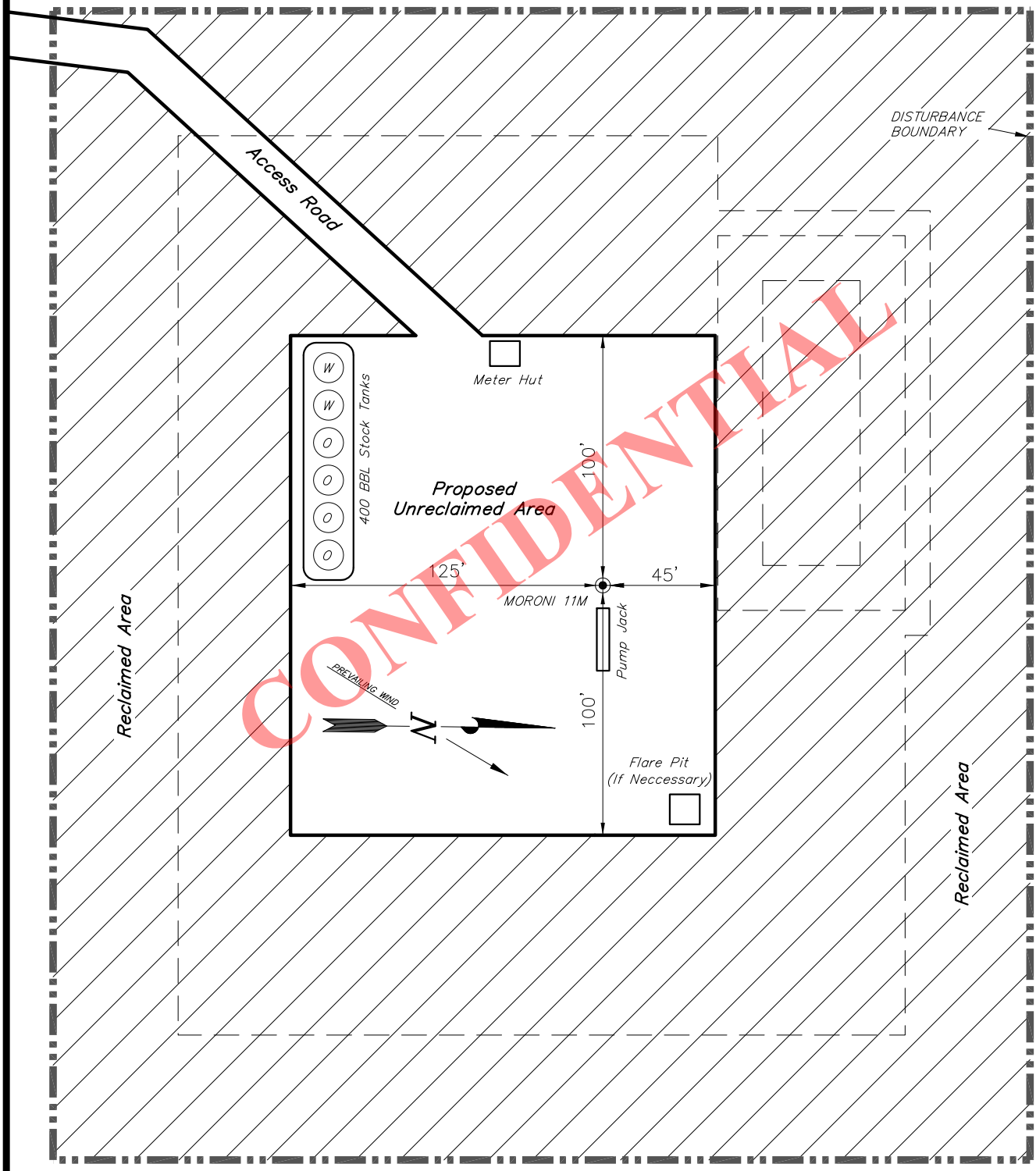
RECEIVED: July 14, 2014

SKYLINE OPERATING COMPANY LLC

FACILITIES LAYOUT & RECLAMATION PLAN

MORONI 11M-1107

Pad Location: SWSW Section 11, T15S, R3E, S.L.B.&M.



Notes:
1. Reclaimed Area to Include Seeding of Approved Vegetation and Sufficient Storm Water Management System.
2. Actual Equipment Layout and Reclaimed Pad Surface Area May Change due to Production Requirements or Site Conditions.

DISTURBED AREA:

TOTAL DISTURBED AREA = ±4.13 ACRES
TOTAL RECLAIMED AREA = ±3.27 ACRES
UNRECLAIMED AREA = ±0.86 ACRES

SURVEYED BY: S.V.	DATE SURVEYED: 06-08-14	Tri State Land Surveying, Inc. (435) 781-2501 180 NORTH VERNAL AVE. VERNAL, UTAH 84078	SHEET 5
DRAWN BY: M.W.	DATE DRAWN: 06-26-14		
SCALE: 1" = 60'	REVISED:		

RECEIVED: July 14, 2014

API Well Number: 43039500050000

API Number: 4303950005

Well Name: Moroni 11M-1107

Township: T15.0S Range: R03.0E Section: 11 Meridian: S

Operator: SKYLINE OPERATING COMPANY, LLC

Map Prepared: 7/18/2014
Map Produced by Diana Mason

Wells Query

Status

- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

Units

STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS

- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED

N

1.500 750 0 1,500 Feet

1:15,368

RECEIVED: July 18, 2014

API Well Number: 43039500050000

BOPE REVIEW SKYLINE OPERATING COMPANY, LLC Moroni 11M-1107 43039500050000

Well Name	SKYLINE OPERATING COMPANY, LLC Moroni 11M-1107 4303950005			
String	Surf	I1	Prod	L1
Casing Size(")	16.000	10.750	7.625	4.500
Setting Depth (TVD)	800	4500	11391	12980
Previous Shoe Setting Depth (TVD)	0	800	4500	11391
Max Mud Weight (ppg)	9.0	9.4	12.0	12.0
BOPE Proposed (psi)	0	500	10000	10000
Casing Internal Yield (psi)	1640	5210	10880	14420
Operators Max Anticipated Pressure (psi)	8100			12.0

Calculations	Surf String	16.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	374		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	278	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	198	NO	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	198	NO	OK
Required Casing/BOPE Test Pressure=		500	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi	*Assumes 1psi/ft frac gradient

Calculations	I1 String	10.750	"	
Max BHP (psi)	.052*Setting Depth*MW=	2200		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1660	NO	5M annular preventer
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1210	NO	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1386	NO	OK
Required Casing/BOPE Test Pressure=		3647	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		800	psi	*Assumes 1psi/ft frac gradient

Calculations	Prod String	7.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	7108		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5741	YES	10M BOP w/annular, rotating head, dbl rams, choke
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4602	YES	manifold, drilling spool
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	5592	NO	OK
Required Casing/BOPE Test Pressure=		7616	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		4500	psi	*Assumes 1psi/ft frac gradient

Calculations	L1 String	4.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	8100		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	6542	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	5244	YES	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	7750	YES	OK
Required Casing/BOPE Test Pressure=		10000	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		10880	psi	*Assumes 1psi/ft frac gradient

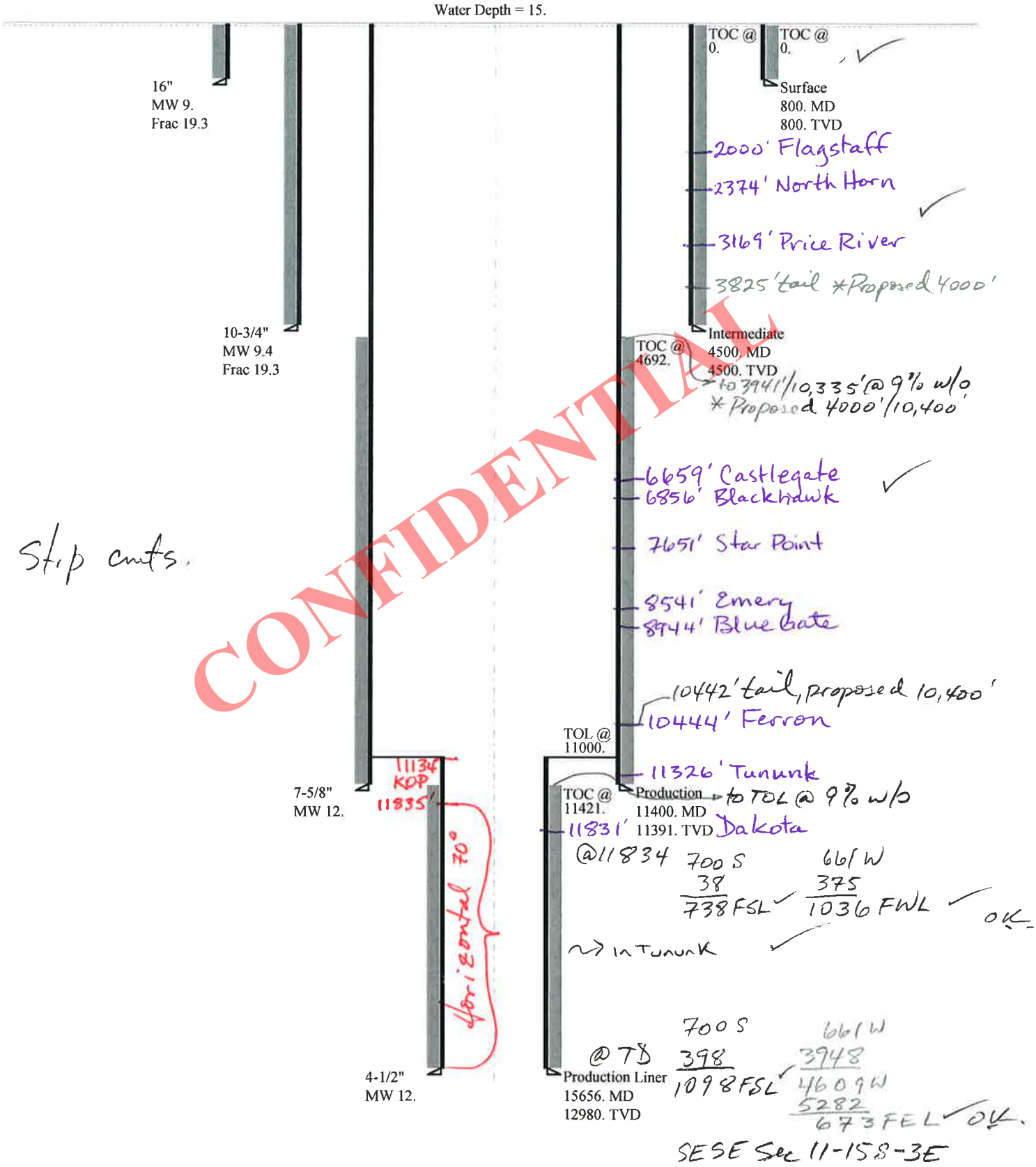
CONFIDENTIAL

RECEIVED: July 22, 2014

API Well Number: 43039500050000

43039500050000 Moroni 11M-1107

Casing Schematic



CONFIDENTIAL

API Well Number: 43039500050000

Well name:	43039500050000 Moroni 11M-1107
Operator:	SKYLINE OPERATING COMPANY, LLC
String type:	Surface
Project ID:	43-039-50005
Location:	SANPETE COUNTY

Design parameters:

Collapse

Mud weight: 9.000 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 704 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 800 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.70 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 694 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 85 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Cement top: Surface

Mudline depth: 15 ft

Water depth: 15 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 4,500 ft

Next mud weight: 9.400 ppg

Next setting BHP: 2,197 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 800 ft

Injection pressure: 800 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	800	16	65.00	H-40	ST&C	800	800	15.125	14256

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	374	630	1.684	800	1640	2.05	52	439	8.44 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: July 16,2014
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 800 ft, a mud weight of 9 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

CONFIDENTIAL

API Well Number: 43039500050000

Well name:	43039500050000 Moroni 11M-1107
Operator:	SKYLINE OPERATING COMPANY, LLC
String type:	Intermediate
Project ID:	43-039-50005
Location:	SANPETE COUNTY

Design parameters:

Collapse

Mud weight: 9.400 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 3,960 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 4,500 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on air weight.

Neutral point: 3,872 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 137 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Cement top: Surface

Mudline depth: 15 ft

Water depth: 15 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 11,391 ft

Next mud weight: 12.000 ppg

Next setting BHP: 7,101 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 4,500 ft

Injection pressure: 4,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	4500	10.75	45.50	N-80	ST&C	4500	4500	9.875	148500

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2197	2470	1.124	4500	5210	1.16	204.8	701	3.42 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: July 16,2014
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4500 ft, a mud weight of 9.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

CONFIDENTIAL

API Well Number: 43039500050000

Well name:	43039500050000 Moroni 11M-1107
Operator:	SKYLINE OPERATING COMPANY, LLC
String type:	Production
Project ID:	43-039-50005
Location:	SANPETE COUNTY

Design parameters:

Collapse

Mud weight: 12.000 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 4,595 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 7,101 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on air weight.

Neutral point: 9,343 ft

Estimated cost: 155,909 ($)

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 233 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Cement top: 4,692 ft

Mudline depth: 15 ft

Water depth: 15 ft

Directional well information:

Kick-off point 11135 ft

Departure at shoe: 60 ft

Maximum dogleg: 10 °/100ft

Inclination at shoe: 26.51 °

CONFIDENTIAL

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
2	8900	7.625	33.70	HCL-80	LT&C	8900	8900	6.64	122943
1	2500	7.625	33.70	HCP-110	LT&C	11391	11400	6.64	32966

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2	5548	8505	1.533	6553	7900	1.21	383.9	762	1.99 J
1	7101	8360	1.177	7101	10860	1.53	83.9	901	10.73 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: July 16,2014
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 11391 ft, a mud weight of 12 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

API Well Number: 43039500050000

Well name:	43039500050000 Moroni 11M-1107
Operator:	SKYLINE OPERATING COMPANY, LLC
String type:	Production Liner
Project ID:	43-039-5000
Location:	SANPETE COUNTY

Design parameters:

Collapse

Mud weight: 12.000 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 5,236 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 8,091 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on air weight.

Neutral point: 14,603 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 256 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Cement top: 11,421 ft

Mudline depth: 15 ft

Water depth: 15 ft

Liner top: 11,000 ft

Directional well information:

Kick-off point 11135 ft

Departure at shoe: 3968 ft

Maximum dogleg: 10 °/100ft

Inclination at shoe: 70 °

CONFIDENTIAL

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	4656	4.5	15.10	HCP-110	LT&C	12980	15656	3.701	29193

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	8091	14350	1.773	8091	14420	1.78	29.9	406	13.58 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: July 16,2014
Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 12980 ft, a mud weight of 12 ppg The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator SKYLINE OPERATING COMPANY, LLC
Well Name Moroni 11M-1107
API Number 43039500050000 **APD No** 10056 **Field/Unit** WILDCAT
Location: 1/4,1/4 SWSW **Sec** 11 **Tw** 15.0S **Rng** 3.0E 700 FSL 661 FWL
GPS Coord (UTM) 451734 4374833 **Surface Owner** D&D HARVEY SANPETE, LLC

Participants

Ammon McDonald (DOGM), Roy Moore (Skyline), Don Hamilton, Lee Schultz, David & Dixie Harvey (landowner)

Regional/Local Setting & Topography

This location is in the High Plateaus section of the Colorado Plateau in west-central Utah. This area is characterized as being within the Basin & Range-Colorado Plateau physiographic transition zone. The proposed location is on fee mineral and fee surface one mile east of the town of Moroni, in the San Pitch River drainage. The Sanpete Valley sits between the San Pitch Mountains to the west and the Wasatch Plateau to the east. The well will be spud in the thin veneer of Quaternary alluvium covering the Tertiary age Green River Formation.

Surrounding area is used for cultivated fields, grazing, and raising livestock. State Route 116 is approximately 0.3-mile to the north and the San Pitch River is approximately 750 feet south. The area of the proposed pad is basically flat and dry with 1-3 foot drop on the south side of pad. Proposed location is approximately one mile east of the town of Moroni. Altitude of the site is approximately 5,554'-5,557'.

CONFIDENTIAL

Surface Use Plan

Current Surface Use
Agricultural
Grazing

New Road Miles	Well Pad		Src Const Material	Surface Formation
0.1	**Width** 360	**Length** 300	Offsite	ALLU

Ancillary Facilities

None with the exception of trailers to be on location during drilling operations. Future operation plans for possible additional well to be drilled on the proposed well site. Operation facilities will be built at a later date.

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands

Flora / Fauna

Flora - Alfalfa, Grasses, and Weeds.

Fauns - Cattle and Sheep.

RECEIVED: August 06, 2014

API Well Number: 43039500050000

Soil Type and Characteristics

Alluvium valley fill

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? Y

irrigation ditches are present on th proposed pad location.

Berm Required? Y

Erosion Sedimentation Control Required?

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

CONFIDENTIAL

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	25 to 75	15
Distance to Surface Water (feet)	300 to 1000	2
Dist. Nearest Municipal Well (ft)	1320 to 5280	5
Distance to Other Wells (feet)	300 to 1320	10
Native Soil Type	Mod permeability	10
Fluid Type	TDS>5000 and	10
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations	>50	>50
Presence Nearby Utility Conduits	Unknown	10
	Final Score	77 1 Sensitivity Level

Characteristics / Requirements

Reserve pit will be constructed so as not to leak, break, or discharge. The reserve pit will be lined with a minimum of 16 mil plastic liner. The pit will be 75' x 150' x 12' in size. The reserve pit will be fenced once it has been lined.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** N

Other Observations / Comments

Ammon McDonald	7/31/2014
Evaluator	**Date / Time**

RECEIVED: August 06, 2014

Application for Permit to Drill
Statement of Basis
Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
10056	43039500050000	LOCKED	OW	P	No
Operator	SKYLINE OPERATING COMPANY, LLC		**Surface Owner-APD**	D&D HARVEY SANPETE, LLC	
Well Name	Moroni 11M-1107		**Unit**		
Field	WILDCAT		**Type of Work**	DRILL	
Location	SWSW 11 15S 3E S 700 FSL 661 FWL GPS Coord (UTM) 451781E 4374679N				

CONFIDENTIAL

Geologic Statement of Basis

The Skyline Operating Co., LLC proposes to use fresh water mud with gel/lime sweeps while drilling the surface casing from 0'-800'. Within a mile of the proposed well location 40 underground water rights are on file; with the water wells ranging from 50' to 250' below the ground surface. Several surface water rights are also in the area. The Moroni #1-A (43-039-30006) was completed as a water well and is approximately 0.5-mile south; it was plugged back to 3,128' and produces fresh water from the Flagstaff Formation. The intermediate casing should be cemented back to surface to protect known deep water zones. The operator should be aware of the likelihood of units being water saturated and to respond to protecting any encountered water zones by extending the surface casing as necessary. The proposed mud, drilling, casing, and cementing programs should be sufficient to protect and isolate the shallow groundwater expected to be encountered at this location.

Ammon McDonald — **APD Evaluator**

8/4/2014 — **Date / Time**

Surface Statement of Basis

A pre-site was conducted at 10:00am July 31, 2014. This area is easily accesses off State Highway 116. The proposed Moroni 11M-1107 pad runs in an east to west direction and is located in the Sanpete Valley. The construction material needed for this location and the access road will be obtained from a local gravel pit. The pad is located on relatively flat ground with a very slight slope to the south.

Skyline Operating Co., LLC will use an open lined pit program. All pit fluids will be hauled to an approved disposal site for waste management once the well is completed. Fresh water source will be from the Moroni #1-A (43-039-30006) well located approximately 0.5-mile south of the well location. Access to the site will be from State Highway #116 to Moroni City street called Race Track Road. Right-of-way agreements have been secured and road improvements, with cattle guards and fencing, will be done prior to drilling. Sanpete County has yet to issue a conditional use permit for the proposed drilling pad and access roads. There are 40 water wells within 1 mile of the proposed well location. The San Pitch River is located approximately 750 feet south. There are two PA wells API #4303930005 and API #4303930006 (completed as a water well), and one shut-in oil well API #4303930007. The town of Moroni is one mile west of the site and the rig lights and noise may be seen and heard from Moroni. Photos are located in the well file. The reserve pit will be lined with a 16 mil thick liner and the location will be bermed and water diversions will be constructed. The

RECEIVED: August 06, 2014

selected location for this well is suitable for drilling.

Ammon McDonald	7/31/2014
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

CONFIDENTIAL

RECEIVED: August 06, 2014

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/14/2014
API NO. ASSIGNED: 43039500050000
WELL NAME: Moroni 11M-1107
OPERATOR: SKYLINE OPERATING COMPANY, LLC (N4110)
PHONE NUMBER: 435-650-3866
CONTACT: Don Hamilton

PROPOSED LOCATION: SWSW 11 150S 030E
Permit Tech Review: ✔

SURFACE: 0700 FSL 0661 FWL
Engineering Review: ✔

BOTTOM: 1061 FSL 0660 FEL
Geology Review: ✔

COUNTY: SANPETE
LATITUDE: 39.52229
LONGITUDE: -111.56099
UTM SURF EASTINGS: 451781.00
NORTHINGS: 4374679.00
FIELD NAME: WILDCAT
LEASE TYPE: 4 - Fee
LEASE NUMBER: Patented
PROPOSED PRODUCING FORMATION(S): TUNUNK
SURFACE OWNER: 4 - Fee
COALBED METHANE: NO

CONFIDENTIAL

RECEIVED AND/OR REVIEWED:

- ✔ **PLAT**
- ✔ **Bond:** STATE/FEE - 31-5-1240
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ✔ **Water Permit:** 65-1854 and 65-3665
- ✔ **RDCC Review:** 2014-08-06 00:00:00.0
- ✔ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ✔ **Drilling Unit**

Board Cause No: R649-3-2.6
Effective Date:
Siting:

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed
TEMP 640 ACRE SPACING:

Stipulations:
5 - Statement of Basis - bhill
8 - Cement to Surface -- 2 strings - hmacdonald
12 - Cement Volume (3) - hmacdonald
13 - Cement Volume Formation (3a) - hmacdonald
21 - RDCC - dmason
23 - Spacing - dmason
26 - Temporary Spacing - bhill
27 - Other - bhill

RECEIVED: August 06, 2014

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: Moroni 11M-1107
API Well Number: 43039500050000
Lease Number: Patented
Surface Owner: FEE (PRIVATE)
Approval Date: 8/6/2014

Issued to:
SKYLINE OPERATING COMPANY, LLC , 1517 Grove Drive, Alpine , UT 84004

Authority:
Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2.6. The expected producing formation or pool is the TUNUNK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
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

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.

Conditions of Approval:
Cement volumes for the 16" and 10 3/4" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7 5/8" production string shall be determined from actual hole diameter in order to place lead cement from the pipe setting depth back to 4000' MD and tail cement to 500' above the top of Ferron as indicated in the submitted drilling plan.

Cement volume for the 4 1/2 production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to TOL in order to adequately isolate the Dakota Formation.

The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will

be required to comply with any applicable recommendations resulting from this review. (See attached)

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.

A temporary 640 acre spacing unit is hereby established in Section 11, Township 15 S, Range 3 E, SLBM for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels OR submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:
The following are Division of Oil, Gas and Mining contacts and their telephone

numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company; **SKYLINE OPERATING COMPANY, LLC**

Well Name: **MORONI 11M-1107**

Api No: **43-039-50005** Lease Type **PATENTED**

Section **11** Township **15S** Range **03E** County **SANPETE**

Drilling Contractor _____ RIG # _____

SPUDDED:

Date **08/27/2014**

Time **3:00 AM**

How **DRY**

Drilling will Commence: _____

Reported by _____

Telephone # _____

Date **06/27 /2014** **Signed** **CHD**

[redacted]

Carol Daniels <caroldaniels@utah.gov>

Fwd: Moroni 11M-1107 Spudded Well at 0300 27 August 2014

1 message

OilGasMining NR <oilgasmining@utah.gov> Thu, Aug 28, 2014 at 10:41 AM
To: Carol Daniels <caroldaniels@utah.gov>

——— Forwarded message ———
From: **mark bercier** <303patterson@gmail.com>
Date: Wed, Aug 27, 2014 at 4:08 AM
Subject: Moroni 11M-1107 Spudded Well at 0300 27 August 2014
To: OilGasMining@utah.gov, Chad Anton <chad.anton@whiting.com>

Attached is the spud notice for the Moroni well.

Moroni 11M-1107 Spud Notice.docx
13K

CONFIDENTIAL

Spud Well at 0300, 27 August 2014

Well Name: Moroni 11M-1107

Surface Loc:Sec 11, T15S, R3E, SLB & M

Lat: 39.522169

Long: -111.560966

Ground Elevation: 5555.1'

Field: Wildcat

Permit # R4-143484-0

API # 4303950005

RECEIVED
AUG 28 2014
DIV. OF OIL, GAS & MINING

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
SKYLINE OPERATING COMPANY, LLC

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1517 Grove Drive , Alpine , UT, 84004

PHONE NUMBER:
807 376-1232 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 9/10/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Skyline Operating Company, LLC respectfully requests that the drilling and horizontal plan be changed to provide back build of the horizontal lateral. Attached please find an updated drilling plan, pilot hole plan, horizontal plan and directional drilling letter reflecting this change.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 09, 2014

By: Dark K Quist

Please Review Attached Conditions of Approval

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Don Hamilton	435-650-3866	Permitting Agent
SIGNATURE		**DATE**
N/A		8/10/2014

RECEIVED: Aug. 10, 2014

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

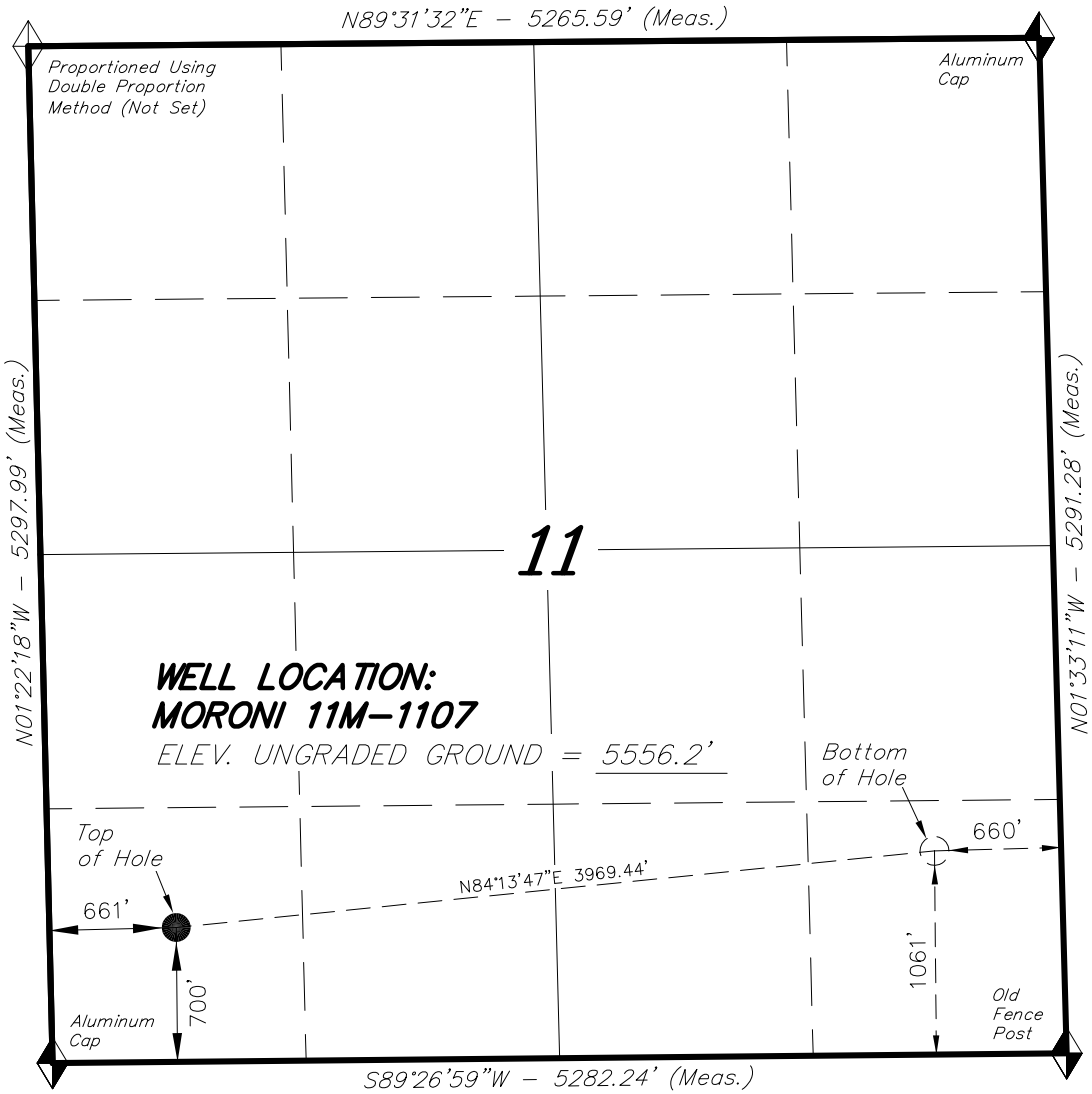
Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43039500050000

As proposed and as required by rule R649-3-2-3, the well shall not be completed or produced within 660' of any lease or track not committed to the drilling of the subject well.

RECEIVED: Sep. 09, 2014

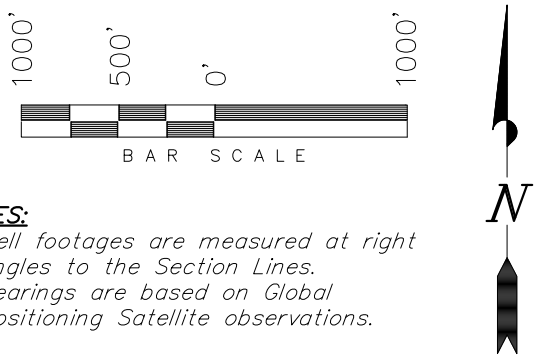
T15S, R3E, S.L.B.&M.



WHITING OIL & GAS CORP.

WELL LOCATION, MORONI 11M–1107, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 11, T15S, R3E, S.L.B.&M. SANPETE COUNTY, UTAH.

TARGET BOTTOM HOLE, MORONI 11M–1107, LOCATED AS SHOWN IN THE SE 1/4 SE 1/4 OF SECTION 11, T15S, R3E, S.L.B.&M. SANPETE COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE 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.

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

REGISTERED LAND SURVEYOR
No. 189377
07-30-14
STACY W. STEWART
STATE OF UTAH

= SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 39°31'53.80" LONG. 111°33'50.61" (Spike) NAVD 88 Elev. 5644.8'

NAD 83 (SURFACE LOCATION)
LATITUDE = 39°31'19.67" (39.522131°)
LONGITUDE = 111°33'42.17" (111.561715°)
NAD 27 (SURFACE LOCATION)
LATITUDE = 39°31'19.81" (39.522169°)
LONGITUDE = 111°33'39.48" (111.560966°)
NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 39°31'23.60" (39.523223°)
LONGITUDE = 111°32'51.79" (111.547719°)
NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 39°31'23.74" (39.523261°)
LONGITUDE = 111°32'49.09" (111.546970°)

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781–2501

DATE SURVEYED: 06–08–14	SURVEYED BY: S.V.	SHEET
DATE DRAWN: 07–01–14	DRAWN BY: M.W.	1
REVISED: 07–30–14 M.W.	SCALE: 1" = 1000'	

RECEIVED: Sep. 02, 2014

WHITING OIL & GAS
Moroni 11M-1107 Drill Plan
Horizontal – Tununk Well
August 28, 2014

Summary:
The Moroni 11M-1107 well will have a vertical pilot hole that will TD at 11,544'MD/11,504'TVD. The vertical well will be plugged back to drill a horizontal well in the Tununk formation. KOP is 11,173'MD/11,134' TVD and an 6-1/8" curve will be drilled to EOB at 12,023' MD, 11,705' TVD. A lateral will be drilled with a 6-1/8" bit to TD at 16,233' MD, 12,991' TVD. 4-1/2" liner will be cemented in place with sliding sleeves will be run in the lateral for completion.

Surface Location: 11-T15S-R3E
700' FSL & 661' FWL
Sanpete County, Utah

Bottomhole Location: 11-T15S-R3E
1,061' FSL & 660' FEL
Sanpete County, Utah

DRILLING PROGRAM

1. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Ground Level 5,555' Estimated KB 5,580' (25')

Formation	TVD	Lithology	Hazard
GREEN RIVER	SURFACE		
FLAGSTAFF	1,995	LS, SH, SS	
NORTH HORN	2,374	SS, SLTST, SH	
PRICE RIVER	3,169	SS, SLTST, SH	
CASTLEGATE	6,659	SS, SLTST, SH	
BLACKHAWK	6,856	SS, SLTST, SH	
STAR POINT	7,651	SS, SLTST, SH	
EMERY	8,541	SS, SLTST, SH	
BLUE GATE	8,944	SLTST, SH	
FERRON	10,444	SS, SH, COAL	
TUNUNK	11,311	SLTST, SH	
DAKOTA	11,831	SS	

2. DIRECTIONAL PLANS

KOP:	11,173' MD, 11,134' TVD
BUILD RATE - AZIMUTH:	10°/100', 90.0° Azimuth
END OF BUILD:	12,023' MD, 11,705' TVD at 85° Inc and 90° Azimuth
TD LATERAL:	16,233' MD, 12,991' TVD at 70° Inc and 90° Azimuth
BH LOCATION:	1,061' FSL & 660' FEL Sec 11 T15S R3E

See attached Directional Proposal Listings for more details.

RECEIVED: Sep. 02, 2014

3. PRESSURE CONTROL EQUIPMENT

A. 14-3/4" Hole Section:

Type: 16" 5,000 psi annular preventer with 5,000 psi Casing head.

9-7/8" Hole Section to TD:

Type: 11" 10,000 psi double gate hydraulic BOP with 11" 5,000 psi annular preventer with 10,000 psi Casing head and 10,000 psi Tubing head.

B. Testing Procedure:

The annular preventer will be pressure tested to 50% of stack rated working pressure for ten (10) minutes or until provisions of test are met, whichever is longer. The BOP, choke manifold, and related equipment will be pressure tested to approved BOP stack working pressure (if isolated from surface casing by a test plug) or to 70% of surface casing internal yield strength (if BOP is not isolated by a test plug). Pressure will be maintained for ten (10) minutes or until the requirements of the test are met, whichever is longer. At a minimum, the Annular and Blow-Out Preventer pressure tests will be performed:

1. When the BOPE is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

Annular will be function tested weekly, and pipe & blind rams activated each trip, but not more than once per day. All BOP drills & tests will be recorded in IADC driller's log.

C. Choke Manifold Equipment:

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

D. Accumulator:

Accumulator will have sufficient capacity to open hydraulically-controlled choke line valve (if so equipped), close all rams plus annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double accumulator capacity and the fluid level will be maintained at manufacturer's recommendations. Accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack.

E. Miscellaneous Information:

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

A flare line will be installed after the choke manifold with the discharge point of the flare line to a separate pit located at least 125 feet away from the wellbore and any existing production facilities.

A volume monitoring system with alarms will be used to monitor pit gains/losses along with visual backup.

RECEIVED: Sep. 02, 2014

4. PROPOSED CASING PROGRAM

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Coupling OD	Burst (psi)	Collapse (psi)	Tension (Body/Joint) (klbs)	Depth Set (md)
20"	16"	65.50	J-55	BTC	17.0"	2,260	630	1,031/439	0 – 800'
14-3/4"	10-3/4"	45.5	NT80-HE	BTC	11.75"	5,510	3,390	1,040/1,097	0 – 4,500'
9-7/8"	7-5/8"	33.7	L80HC	LTC	8.5"	7,890	7,460	664/778	0 – 5,450'
9-7/8"	7-5/8"	39.0	L80HC	LTC	8.5"	9,190	9,480	895/786	8,900'-11,244'
6.125"	4-1/2"	15.1	P110HC	LTC	5"	14,420	15,130	485/406	11,100' – 16,233'

16" surface casing will have centralizers as follows:

1. Install a bowspring centralizer at the first and second collars above the guide shoe.
2. Install one bowspring centralizer every third joint above the second collar.
3. Centralizer and basket placed 120' below the surface (or at the bottom of the third joint below the surface).
4. Centralizer and basket placed 80' below the surface (or at the bottom of the second joint below the surface).

10-3/4" intermediate casing will have centralizers as follows:

1. Install a bowspring centralizer at the first and second collars above the guide shoe.
2. After that centralize every third joint to surface with single bow spring centralizers

7-5/8" production casing will have centralizers as follows:

1. Install a bowspring centralizer at the first and second collars above the guide shoe.
2. After that centralize every third joint to 4,000' with single bow spring centralizers.

4-1/2" Liner to be run solid body centralizers (placement to be determined based on drilling results)

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

B. Casing Design Parameters:

Surface Casing

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
0' – 800'	16"	65.5 lb/ft	J-55	2,260/2.87	630/1.68	439/9.79

a. based on frac gradient at shoe of 14.0 ppg
b. based on full evacuation with 9.0 ppg fluid on backside
c. based on casing string weight in 9.0 ppg mud
String Weight in 9.0 ppg mud ≈ 44,855 lbs

Intermediate Casing

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
0' – 4,500'	10-3/4"	45.5 lb/ft	NT-80HE	5,510/1.32	3,390/1.54	1,040/5.93

a. based on frac gradient at shoe of 14.0 ppg
b. based on full evacuation with 9.4 ppg pore pressure on backside
c. based on casing string weight in 9.4 ppg mud
String Weight in 9.4 ppg mud ≈ 175,366 lbs.

RECEIVED: Sep. 02, 2014

Production Casing

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
0'-5,450'	7-5/8"	33.7 lb/ft	L-80HC	7,890/2.57	7,460/2.61	664/1.98
5,450'-11,244'	7-5/8"	39.0 lb/ft	L-80HC	9,190/9.97	9,480/5.08	786/4.26

a. based on using frac string(7-5/8" will not see frac pressure).
b. based on full evacuation with 9.4 ppg pore pressure on backside
c. based on casing string weight in 12.0 ppg mud
String Weight in 12.0 ppg mud ≈ 334,584 lbs.

Production Liner

Interval	Size	Wt	Grade	Burst (psi)[a]/SF	Collapse (psi)[b]/SF	Tension (klb)[c]/SF
11,100'-16,233'	4-1/2"	15.1 lb/ft	P-110	14,420/1.2	14,340/2.09	406/7.07

a. based on 12,000 psi frac pressure.
b. based on full evacuation with 9.4 ppg pore pressure on backside
c. based on casing string weight in 12.0 ppg mud
String Weight in 12.0 ppg mud ≈ 63,173 lbs.

5. PROPOSED CEMENTING PROGRAM

Surface Casing – 16" Casing: TOC Surface, (100% Excess)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
16"	Lead	550'	Lead Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	315	100	11.5	2.76
16"	Tail	250'	Tail Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	265	100	13.5	1.68

A cement top job is required if cement fallback is greater than 10' below ground level.

Intermediate Casing – 10-3/4" Casing: TOC Surface, (100%)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
10-3/4"	Lead	4,000'	Lead Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	1475	100	11.5	2.76
10-3/4"	Tail	500'	Tail Cement Halliburton Varicem ™ ; - 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive)	345	100	13.5	1.68

Cement volumes for the 10-3/4" Intermediate Casing will be calculated to provide a top of cement to Surface.

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

RECEIVED: Sep. 02, 2014

Production Casing – 7-5/8" Casing: TOC @3,800', (50% Excess)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
7-5/8"	Lead	6,400'	Lead Cement ECONOCEM ™ SYSTEM; -1lbm Granulite TR 1/4 - 0.50 lbm/sk Poly-E-Flake (Lost Circulation Additive) -3 lbm Kol-Seal	825	50	11.5	2.44
7-5/8"	Tail	1,000'	Tail Cement EXPANADCEM™ SYSTEM; -1lbm Granulite TR 1/4 - 0.50 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.6 % HR-5 (Retarder)	225	50	13.5	1.49

Cement volumes for the 7-5/8" Production Casing will be calculated to provide a top of cement to 4,000'.

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

Pilot Hole Plug Back Slurry: TOC @11,175', (35% Excess)

HOLE SIZE	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
6-1/8"	Tail	358'	Tail Cement HALCEM™ SYSTEM; -35% SS-200 -0.50% SCR-100	65	35	15.8	1.516

No waiting time will be necessary since a cased-hole whip stock will be used to kick off inside of casing.

Production Casing – 4-1/2" Liner: TOC @11,100', (35% Excess)

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	XC (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
4-1/2"	Tail	5,122'	Tail Cement EXPANADCEM™ SYSTEM; -20% SS-200 - 0.25 lbm/sk Poly-E-Flake (Lost Circulation Additive) - 0.25 lbm/sk Kwik Seal (Lost Circulation Additive) -0.50% D-AIR 5000 - 0.8 % HR-601	366	35	13.5	1.78

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 11,100'.

6. MUD PROGRAM

Depth (MD)	Mud System	MW	PV	YP	FL
0 -800'	Water, Gel/Lime Sweeps	8.4 – 9.0	2 - 20	2 - 18	NC
800' – 3,000'	3% KCL Water/Polymer	8.4 – 9.4	10 - 28	6 - 18	6 - 10
3,000' – 4,500'	3% KCL Water/Polymer	8.4 – 9.4	14 - 32	10 - 22	4 - 10
4,500' – 11,244'	3% KCL Water/Polymer	9.4 – 12.0	14 – 32	10 – 22	4 – 10
11,173-16,233'	OBM	9.4 – 12.0	10 – 12	8 – 10	HTHP≤12

RECEIVED: Sep. 02, 2014

7. EVALUATION PROGRAM

Cores: Core of Tununk from 11,233' – 11,533'

DST: None planned

Surveys: Deviation surveys every 90' to TD in the surface, intermediate and production holes.

Mud Logger:
Samples: 30' samples surface to TD

Open Hole Logging Program: Triple Combo and Sonic 11,233' to 4,500'
VSP to be run over 7-5/8" cased hole
Triple Combo, Sonic Scanner, FMI, and MDT 11,533' to 11,233'

8. ABNORMAL CONDITIONS

No abnormal pressures are anticipated. No H_2S gas is anticipated.

Anticipated bottom hole pressure is 8,100 psi (0.62 psi/ft) at 12,980' TVD in the Tununk and the maximum anticipated surface pressure equals approximately 5,244 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

9. ANTICIPATED STARTING DATES

A. Anticipated Starting Dates:

Dirt work startup: August 2014

Spud: September 2014

Duration: 45 – 55 days

RECEIVED: Sep. 02, 2014

10. Additional Information for Oil Base Mud

A. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 0.030" (0.75 mm +/-) thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.

B. Oil-base mud will be mixed in the closed circulating system and transferred to one or more 400 bbl or 500 bbl tanks (as available) on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be transferred to the cuttings pit nearest the shakers and stored in this cuttings pit for solidification after the rig is released and moved off location.

C. The means to transport the cuttings from the solids control equipment to the OBM cuttings pit will be dictated by the size of the location:

   a. Option 1: By track-hoe or similar equipment from a cuttings bin to the cuttings pit.
   b. Option 2: By 10" PVC pipe or equivalent steel piping. Water will be pumped to the solids control equipment and will convey the OBM cuttings from the solids control equipment to the OBM cuttings pit via the PVC pipe. The water will be recycled multiple times from the cuttings pit to continue to transport the cuttings to the cuttings pit. The conveyance system will be enclosed on the solids control end to prevent spills. The conveyance piping system at the cuttings pit end will be placed on top of pit liner to eliminate absorption of fluids into the soil.

D. Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings pit.

E. All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.

F. Once all waste has been placed in the cuttings pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings pit and will be returned to the existing grade bordering the pit.

RECEIVED: Sep. 02, 2014

Company: Whiting Oil & Gas
Site: Moroni 11M
Well: 1107
Project: Sanpete County, Utah (NAD 83)
Rig Name: Patterson 303

MS Energy Services
WWW.MSENERGYSERVICES.COM

PILOT HOLE ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	KOP, 2.00°/100' Build
4932.20	6.64	304.92	4931.46	11.01	-15.78	9.75	19.24	Hold 6.64° Inc, 304.92° Azm
10610.42	6.64	304.92	10571.54	387.05	-554.49	342.76	676.22	Begin 2.00°/100' Drop
10942.62	0.00	0.00	10903.00	398.06	-570.27	352.51	695.46	Begin Vertical Hold
11543.62	0.00	0.00	11504.00	398.06	-570.27	352.51	695.46	Pilot Hole PBHL - 11543.62'

ANNOTATIONS

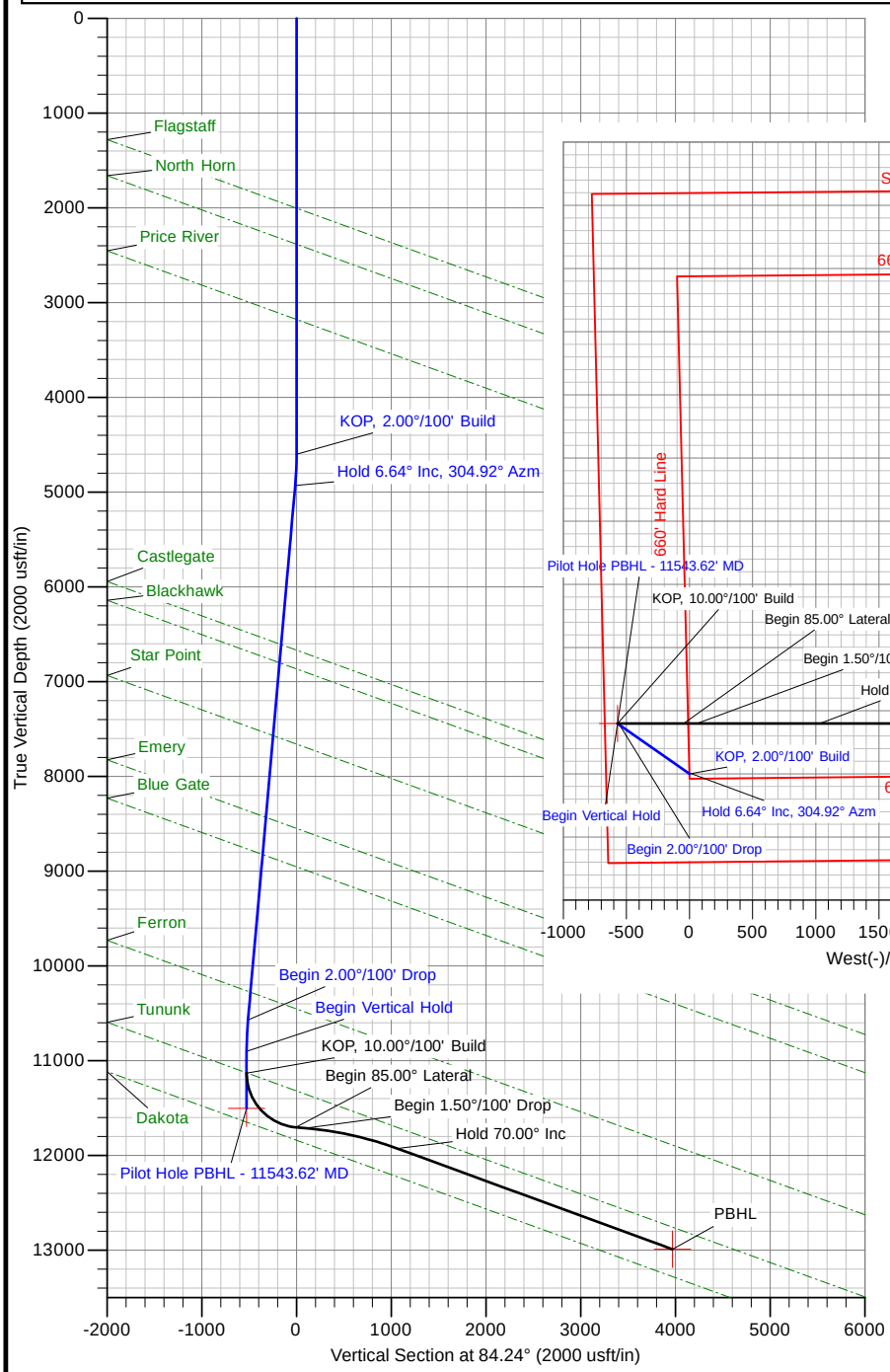
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
11173.40	0.00	0.00	11133.78	398.06	-570.27	-527.44	0.00	KOP, 10.00°/100' Build
12023.40	85.00	90.00	11704.55	398.06	-47.25	-7.06	523.02	Begin 85.00° Lateral
12129.40	85.00	90.00	11713.79	398.06	58.35	98.00	628.62	Begin 1.50°/100' Drop
13129.67	70.00	90.00	11929.71	398.06	1032.11	1066.85	1602.38	Hold 70.00° Inc
16232.73	70.00	90.00	12991.22	398.06	3947.95	3967.97	4518.23	PBHL

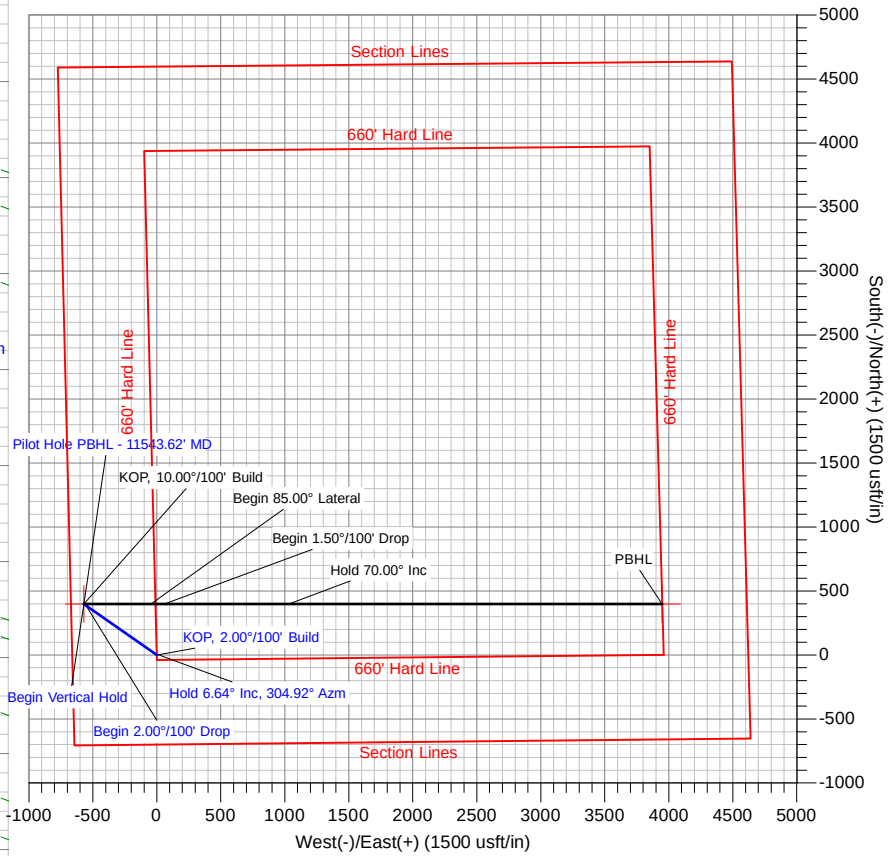
T M
Azimuths to True North
Magnetic North: 11.40°

Magnetic Field
Strength: 51462.0snT
Dip Angle: 64.98°
Date: 8/26/2014
Model: WMM_2010

US State Plane 1983
Utah Central Zone

Created By: TWG
Date: 16:27, August 25 2014
Plan: Design #7 WE





The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented.
Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer.
MS Energy is not responsible for the accuracy of this schematic or the information contained herein.

Whiting Oil & Gas

Sanpete County, Utah (NAD 83)
Moroni 11M
1107

Pilot Hole

Plan: Pilot Hole #1

Standard Planning Report

25 August, 2014

MS Energy Services
WWW.MSENERGYSERVICES.COM

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Pilot Hole #1		

Project Sanpete County, Utah (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Well 1107

Well Position	**+N/-S**	7,068,139.86 usft	**Northing:**	6,994,672.76 usft	**Latitude:**	39° 31' 19.671 N
	+E/-W	1,265,306.66 usft	**Easting:**	1,623,007.99 usft	**Longitude:**	111° 33' 42.174 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	5,556.00 usft

Wellbore Pilot Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	8/26/2014	11.40	64.98	51,462

Design Pilot Hole #1

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	4.46

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,932.20	6.64	304.92	4,931.46	11.01	-15.78	2.00	2.00	0.00	304.92	
10,610.42	6.64	304.92	10,571.54	387.05	-554.49	0.00	0.00	0.00	0.00	
10,942.62	0.00	0.00	10,903.00	398.06	-570.27	2.00	-2.00	0.00	180.00	
11,543.62	0.00	0.00	11,504.00	398.06	-570.27	0.00	0.00	0.00	0.00	

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Pilot Hole #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,006.00	0.00	0.00	2,006.00	0.00	0.00	0.00	0.00	0.00	0.00
Flagstaff									
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,385.00	0.00	0.00	2,385.00	0.00	0.00	0.00	0.00	0.00	0.00
North Horn									
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,180.00	0.00	0.00	3,180.00	0.00	0.00	0.00	0.00	0.00	0.00
Price River									
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 2.00°/100' Build									

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Pilot Hole #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	2.00	304.92	4,699.98	1.00	-1.43	0.88	2.00	2.00	0.00
4,800.00	4.00	304.92	4,799.84	3.99	-5.72	3.54	2.00	2.00	0.00
4,900.00	6.00	304.92	4,899.45	8.98	-12.87	7.95	2.00	2.00	0.00
4,932.20	6.64	304.92	4,931.46	11.01	-15.78	9.75	2.00	2.00	0.00
Hold 6.64° Inc, 304.92° Azm									
5,000.00	6.64	304.92	4,998.80	15.50	-22.21	13.73	0.00	0.00	0.00
5,100.00	6.64	304.92	5,098.13	22.12	-31.70	19.59	0.00	0.00	0.00
5,200.00	6.64	304.92	5,197.46	28.75	-41.18	25.46	0.00	0.00	0.00
5,300.00	6.64	304.92	5,296.79	35.37	-50.67	31.32	0.00	0.00	0.00
5,400.00	6.64	304.92	5,396.11	41.99	-60.16	37.19	0.00	0.00	0.00
5,500.00	6.64	304.92	5,495.44	48.61	-69.65	43.05	0.00	0.00	0.00
5,600.00	6.64	304.92	5,594.77	55.24	-79.13	48.92	0.00	0.00	0.00
5,700.00	6.64	304.92	5,694.10	61.86	-88.62	54.78	0.00	0.00	0.00
5,800.00	6.64	304.92	5,793.43	68.48	-98.11	60.64	0.00	0.00	0.00
5,900.00	6.64	304.92	5,892.76	75.10	-107.60	66.51	0.00	0.00	0.00
6,000.00	6.64	304.92	5,992.08	81.73	-117.08	72.37	0.00	0.00	0.00
6,100.00	6.64	304.92	6,091.41	88.35	-126.57	78.24	0.00	0.00	0.00
6,200.00	6.64	304.92	6,190.74	94.97	-136.06	84.10	0.00	0.00	0.00
6,300.00	6.64	304.92	6,290.07	101.59	-145.55	89.97	0.00	0.00	0.00
6,400.00	6.64	304.92	6,389.40	108.22	-155.03	95.83	0.00	0.00	0.00
6,500.00	6.64	304.92	6,488.73	114.84	-164.52	101.70	0.00	0.00	0.00
6,600.00	6.64	304.92	6,588.06	121.46	-174.01	107.56	0.00	0.00	0.00
6,618.11	6.64	304.92	6,606.04	122.66	-175.73	108.62	0.00	0.00	0.00
Castlegate									
6,700.00	6.64	304.92	6,687.38	128.08	-183.50	113.43	0.00	0.00	0.00
6,800.00	6.64	304.92	6,786.71	134.71	-192.98	119.29	0.00	0.00	0.00
6,809.78	6.64	304.92	6,796.42	135.35	-193.91	119.86	0.00	0.00	0.00
Blackhawk									
6,900.00	6.64	304.92	6,886.04	141.33	-202.47	125.16	0.00	0.00	0.00
7,000.00	6.64	304.92	6,985.37	147.95	-211.96	131.02	0.00	0.00	0.00
7,100.00	6.64	304.92	7,084.70	154.57	-221.45	136.88	0.00	0.00	0.00
7,200.00	6.64	304.92	7,184.03	161.20	-230.93	142.75	0.00	0.00	0.00
7,300.00	6.64	304.92	7,283.35	167.82	-240.42	148.61	0.00	0.00	0.00
7,400.00	6.64	304.92	7,382.68	174.44	-249.91	154.48	0.00	0.00	0.00
7,500.00	6.64	304.92	7,482.01	181.06	-259.39	160.34	0.00	0.00	0.00
7,583.26	6.64	304.92	7,564.71	186.58	-267.29	165.23	0.00	0.00	0.00
Star Point									
7,600.00	6.64	304.92	7,581.34	187.69	-268.88	166.21	0.00	0.00	0.00
7,700.00	6.64	304.92	7,680.67	194.31	-278.37	172.07	0.00	0.00	0.00
7,800.00	6.64	304.92	7,780.00	200.93	-287.86	177.94	0.00	0.00	0.00
7,900.00	6.64	304.92	7,879.32	207.55	-297.34	183.80	0.00	0.00	0.00
8,000.00	6.64	304.92	7,978.65	214.17	-306.83	189.67	0.00	0.00	0.00
8,100.00	6.64	304.92	8,077.98	220.80	-316.32	195.53	0.00	0.00	0.00
8,200.00	6.64	304.92	8,177.31	227.42	-325.81	201.40	0.00	0.00	0.00
8,300.00	6.64	304.92	8,276.64	234.04	-335.29	207.26	0.00	0.00	0.00
8,400.00	6.64	304.92	8,375.97	240.66	-344.78	213.12	0.00	0.00	0.00
8,449.18	6.64	304.92	8,424.81	243.92	-349.45	216.01	0.00	0.00	0.00
Emery									
8,500.00	6.64	304.92	8,475.29	247.29	-354.27	218.99	0.00	0.00	0.00
8,600.00	6.64	304.92	8,574.62	253.91	-363.76	224.85	0.00	0.00	0.00
8,700.00	6.64	304.92	8,673.95	260.53	-373.24	230.72	0.00	0.00	0.00
8,800.00	6.64	304.92	8,773.28	267.15	-382.73	236.58	0.00	0.00	0.00
8,841.27	6.64	304.92	8,814.27	269.89	-386.65	239.00	0.00	0.00	0.00

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Pilot Hole #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Blue Gate									
8,900.00	6.64	304.92	8,872.61	273.78	-392.22	242.45	0.00	0.00	0.00
9,000.00	6.64	304.92	8,971.94	280.40	-401.71	248.31	0.00	0.00	0.00
9,100.00	6.64	304.92	9,071.27	287.02	-411.19	254.18	0.00	0.00	0.00
9,200.00	6.64	304.92	9,170.59	293.64	-420.68	260.04	0.00	0.00	0.00
9,300.00	6.64	304.92	9,269.92	300.27	-430.17	265.91	0.00	0.00	0.00
9,400.00	6.64	304.92	9,369.25	306.89	-439.66	271.77	0.00	0.00	0.00
9,500.00	6.64	304.92	9,468.58	313.51	-449.14	277.63	0.00	0.00	0.00
9,600.00	6.64	304.92	9,567.91	320.13	-458.63	283.50	0.00	0.00	0.00
9,700.00	6.64	304.92	9,667.24	326.76	-468.12	289.36	0.00	0.00	0.00
9,800.00	6.64	304.92	9,766.56	333.38	-477.61	295.23	0.00	0.00	0.00
9,900.00	6.64	304.92	9,865.89	340.00	-487.09	301.09	0.00	0.00	0.00
10,000.00	6.64	304.92	9,965.22	346.62	-496.58	306.96	0.00	0.00	0.00
10,100.00	6.64	304.92	10,064.55	353.25	-506.07	312.82	0.00	0.00	0.00
10,200.00	6.64	304.92	10,163.88	359.87	-515.56	318.69	0.00	0.00	0.00
10,300.00	6.64	304.92	10,263.21	366.49	-525.04	324.55	0.00	0.00	0.00
10,300.68	6.64	304.92	10,263.88	366.54	-525.11	324.59	0.00	0.00	0.00
Ferron									
10,400.00	6.64	304.92	10,362.53	373.11	-534.53	330.42	0.00	0.00	0.00
10,500.00	6.64	304.92	10,461.86	379.74	-544.02	336.28	0.00	0.00	0.00
10,600.00	6.64	304.92	10,561.19	386.36	-553.51	342.15	0.00	0.00	0.00
10,610.42	6.64	304.92	10,571.54	387.05	-554.49	342.76	0.00	0.00	0.00
Begin 2.00°/100' Drop									
10,700.00	4.85	304.92	10,660.67	392.18	-561.85	347.30	2.00	-2.00	0.00
10,800.00	2.85	304.92	10,760.44	396.03	-567.36	350.71	2.00	-2.00	0.00
10,900.00	0.85	304.92	10,860.38	397.88	-570.01	352.35	2.00	-2.00	0.00
10,942.62	0.00	0.00	10,903.00	398.06	-570.27	352.51	2.00	-2.00	0.00
Begin Vertical Hold									
11,000.00	0.00	0.00	10,960.38	398.06	-570.27	352.51	0.00	0.00	0.00
11,100.00	0.00	0.00	11,060.38	398.06	-570.27	352.51	0.00	0.00	0.00
11,154.06	0.00	0.00	11,114.44	398.06	-570.27	352.51	0.00	0.00	0.00
Tununk									
11,200.00	0.00	0.00	11,160.38	398.06	-570.27	352.51	0.00	0.00	0.00
11,300.00	0.00	0.00	11,260.38	398.06	-570.27	352.51	0.00	0.00	0.00
11,400.00	0.00	0.00	11,360.38	398.06	-570.27	352.51	0.00	0.00	0.00
11,500.00	0.00	0.00	11,460.38	398.06	-570.27	352.51	0.00	0.00	0.00
11,543.62	0.00	0.00	11,504.00	398.06	-570.27	352.51	0.00	0.00	0.00
Pilot Hole PBHL - 11543.62'									

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Pilot Hole #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Moroni 11M-110 - plan hits target center - Point	0.00	0.00	10,914.00	398.06	-570.27	6,995,071.22	1,622,437.99	39° 31' 23.606 N	111° 33' 49.452 W
Top of Tununk - 1110 - plan hits target center - Point	0.00	0.00	11,114.44	398.06	-570.27	6,995,071.22	1,622,437.99	39° 31' 23.606 N	111° 33' 49.452 W
Pilot Hole PBHL - 115 - plan hits target center - Point	0.00	0.00	11,504.00	398.06	-570.27	6,995,071.21	1,622,437.99	39° 31' 23.606 N	111° 33' 49.452 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,006.00	2,006.00	Flagstaff		20.00	90.00
2,385.00	2,385.00	North Horn		20.00	90.00
3,180.00	3,180.00	Price River		20.00	90.00
6,618.11	6,606.04	Castlegate		20.00	90.00
6,809.78	6,796.42	Blackhawk		20.00	90.00
7,583.26	7,564.71	Star Point		20.00	90.00
8,449.18	8,424.81	Emery		20.00	90.00
8,841.27	8,814.27	Blue Gate		20.00	90.00
10,300.68	10,263.88	Ferron		20.00	90.00
11,154.06	11,114.44	Tununk		20.00	90.00

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
4,600.00	4,600.00	0.00	0.00	KOP, 2.00°/100' Build
4,932.20	4,931.46	11.01	-15.78	Hold 6.64° Inc, 304.92° Azm
10,610.42	10,571.54	387.05	-554.49	Begin 2.00°/100' Drop
10,942.62	10,903.00	398.06	-570.27	Begin Vertical Hold
11,543.62	11,504.00	398.06	-570.27	Pilot Hole PBHL - 11543.62'

RECEIVED: Sep. 02, 2014

Whiting Oil & Gas

Sanpete County, Utah (NAD 83)
Moroni 11M
1107

Wellbore #1

Plan: Design #7 WE

Standard Planning Report

25 August, 2014

WWW.MSENERGYSERVICES.COM

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #7 WE		

Project Sanpete County, Utah (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Well 1107

Well Position	**+N/-S**	7,068,139.86 usft	**Northing:**	6,994,672.76 usft	**Latitude:**	39° 31' 19.671 N
	+E/-W	1,265,306.66 usft	**Easting:**	1,623,007.99 usft	**Longitude:**	111° 33' 42.174 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	5,556.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	8/26/2014	11.40	64.98	51,462

Design Design #7 WE

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	11,173.40

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	84.24

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
11,173.40	0.00	0.00	11,133.78	398.06	-570.27	0.00	0.00	0.00	0.00	
12,023.40	85.00	90.00	11,704.56	398.06	-47.25	10.00	10.00	0.00	90.00	
12,129.40	85.00	90.00	11,713.79	398.06	58.35	0.00	0.00	0.00	0.00	
13,129.67	70.00	90.00	11,929.71	398.06	1,032.11	1.50	-1.50	0.00	180.00	
16,232.73	70.00	90.00	12,991.22	398.06	3,947.95	0.00	0.00	0.00	0.00	PBHL v7 - Moroni 1

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #7 WE		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,173.40	0.00	0.00	11,133.78	398.06	-570.27	-527.44	0.00	0.00	0.00
KOP, 10.00°/100' Build									
11,200.00	2.66	90.00	11,160.37	398.06	-569.65	-526.83	10.00	10.00	0.00
11,250.00	7.66	90.00	11,210.15	398.06	-565.16	-522.35	10.00	10.00	0.00
11,300.00	12.66	90.00	11,259.35	398.06	-556.34	-513.58	10.00	10.00	0.00
11,350.00	17.66	90.00	11,307.59	398.06	-543.27	-500.58	10.00	10.00	0.00
11,400.00	22.66	90.00	11,354.52	398.06	-526.04	-483.44	10.00	10.00	0.00
11,450.00	27.66	90.00	11,399.76	398.06	-504.79	-462.29	10.00	10.00	0.00
11,500.00	32.66	90.00	11,442.98	398.06	-479.68	-437.31	10.00	10.00	0.00
11,550.00	37.66	90.00	11,483.84	398.06	-450.90	-408.67	10.00	10.00	0.00
11,600.00	42.66	90.00	11,522.04	398.06	-418.66	-376.60	10.00	10.00	0.00
11,650.00	47.66	90.00	11,557.29	398.06	-383.22	-341.33	10.00	10.00	0.00
11,700.00	52.66	90.00	11,589.31	398.06	-344.84	-303.15	10.00	10.00	0.00
11,750.00	57.66	90.00	11,617.86	398.06	-303.81	-262.33	10.00	10.00	0.00
11,800.00	62.66	90.00	11,642.73	398.06	-260.46	-219.19	10.00	10.00	0.00
11,850.00	67.66	90.00	11,663.73	398.06	-215.10	-174.06	10.00	10.00	0.00
11,900.00	72.66	90.00	11,680.70	398.06	-168.08	-127.28	10.00	10.00	0.00
11,950.00	77.66	90.00	11,693.50	398.06	-119.76	-79.21	10.00	10.00	0.00
12,000.00	82.66	90.00	11,702.04	398.06	-70.51	-30.21	10.00	10.00	0.00
12,023.40	85.00	90.00	11,704.56	398.06	-47.25	-7.06	10.00	10.00	0.00
Begin 85.00° Lateral									
12,100.00	85.00	90.00	11,711.23	398.06	29.06	68.86	0.00	0.00	0.00
12,129.40	85.00	90.00	11,713.79	398.06	58.35	98.00	0.00	0.00	0.00
Begin 1.50°/100' Drop									
12,200.00	83.94	90.00	11,720.60	398.06	128.62	167.92	1.50	-1.50	0.00
12,300.00	82.44	90.00	11,732.45	398.06	227.91	266.71	1.50	-1.50	0.00
12,400.00	80.94	90.00	11,746.90	398.06	326.86	365.16	1.50	-1.50	0.00
12,500.00	79.44	90.00	11,763.94	398.06	425.39	463.19	1.50	-1.50	0.00
12,600.00	77.94	90.00	11,783.55	398.06	523.45	560.75	1.50	-1.50	0.00
12,700.00	76.44	90.00	11,805.72	398.06	620.96	657.77	1.50	-1.50	0.00
12,800.00	74.94	90.00	11,830.43	398.06	717.85	754.18	1.50	-1.50	0.00
12,900.00	73.44	90.00	11,857.67	398.06	814.07	849.91	1.50	-1.50	0.00
13,000.00	71.94	90.00	11,887.43	398.06	909.53	944.89	1.50	-1.50	0.00
13,100.00	70.44	90.00	11,919.67	398.06	1,004.19	1,039.07	1.50	-1.50	0.00
13,129.67	70.00	90.00	11,929.71	398.06	1,032.11	1,066.85	1.50	-1.50	0.00
Hold 70.00° Inc									
13,200.00	70.00	90.00	11,953.77	398.06	1,098.20	1,132.60	0.00	0.00	0.00
13,300.00	70.00	90.00	11,987.98	398.06	1,192.16	1,226.10	0.00	0.00	0.00
13,400.00	70.00	90.00	12,022.18	398.06	1,286.13	1,319.59	0.00	0.00	0.00
13,500.00	70.00	90.00	12,056.39	398.06	1,380.10	1,413.08	0.00	0.00	0.00
13,600.00	70.00	90.00	12,090.60	398.06	1,474.07	1,506.57	0.00	0.00	0.00
13,700.00	70.00	90.00	12,124.81	398.06	1,568.03	1,600.07	0.00	0.00	0.00
13,800.00	70.00	90.00	12,159.02	398.06	1,662.00	1,693.56	0.00	0.00	0.00
13,900.00	70.00	90.00	12,193.23	398.06	1,755.97	1,787.05	0.00	0.00	0.00
14,000.00	70.00	90.00	12,227.44	398.06	1,849.93	1,880.54	0.00	0.00	0.00
14,100.00	70.00	90.00	12,261.65	398.06	1,943.90	1,974.03	0.00	0.00	0.00
14,200.00	70.00	90.00	12,295.85	398.06	2,037.87	2,067.53	0.00	0.00	0.00
14,300.00	70.00	90.00	12,330.06	398.06	2,131.83	2,161.02	0.00	0.00	0.00
14,400.00	70.00	90.00	12,364.27	398.06	2,225.80	2,254.51	0.00	0.00	0.00
14,500.00	70.00	90.00	12,398.48	398.06	2,319.77	2,348.00	0.00	0.00	0.00
14,600.00	70.00	90.00	12,432.69	398.06	2,413.73	2,441.50	0.00	0.00	0.00
14,700.00	70.00	90.00	12,466.90	398.06	2,507.70	2,534.99	0.00	0.00	0.00
14,800.00	70.00	90.00	12,501.11	398.06	2,601.67	2,628.48	0.00	0.00	0.00
14,900.00	70.00	90.00	12,535.31	398.06	2,695.63	2,721.97	0.00	0.00	0.00

RECEIVED: Sep. 02, 2014

WHITING

Planning Report

MS Energy Services
WWW.MSENERGYSERVICES.COM

Database:	EDM 5000.1 Conroe DB	**Local Co-ordinate Reference:**	Well 1107
Company:	Whiting Oil & Gas	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Project:	Sanpete County, Utah (NAD 83)	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**North Reference:**	True
Well:	1107	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #7 WE		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,000.00	70.00	90.00	12,569.52	398.06	2,789.60	2,815.47	0.00	0.00	0.00
15,100.00	70.00	90.00	12,603.73	398.06	2,883.57	2,908.96	0.00	0.00	0.00
15,200.00	70.00	90.00	12,637.94	398.06	2,977.53	3,002.45	0.00	0.00	0.00
15,300.00	70.00	90.00	12,672.15	398.06	3,071.50	3,095.94	0.00	0.00	0.00
15,400.00	70.00	90.00	12,706.36	398.06	3,165.47	3,189.44	0.00	0.00	0.00
15,500.00	70.00	90.00	12,740.57	398.06	3,259.43	3,282.93	0.00	0.00	0.00
15,600.00	70.00	90.00	12,774.78	398.06	3,353.40	3,376.42	0.00	0.00	0.00
15,700.00	70.00	90.00	12,808.98	398.06	3,447.37	3,469.91	0.00	0.00	0.00
15,800.00	70.00	90.00	12,843.19	398.06	3,541.34	3,563.41	0.00	0.00	0.00
15,900.00	70.00	90.00	12,877.40	398.06	3,635.30	3,656.90	0.00	0.00	0.00
16,000.00	70.00	90.00	12,911.61	398.06	3,729.27	3,750.39	0.00	0.00	0.00
16,100.00	70.00	90.00	12,945.82	398.06	3,823.24	3,843.88	0.00	0.00	0.00
16,200.00	70.00	90.00	12,980.03	398.06	3,917.20	3,937.37	0.00	0.00	0.00
16,232.73	70.00	90.00	12,991.22	398.06	3,947.95	3,967.97	0.00	0.00	0.00
PBHL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Pilot Hole PBHL - 115	0.00	0.00	11,504.00	398.06	-570.27	6,995,071.21	1,622,437.99	39° 31' 23.606 N	111° 33' 49.452 W
- plan misses target center by 109.23usft at 11500.00usft MD (11442.98 TVD, 398.06 N, -479.68 E)									
- Point									
PBHL v7 - Moroni 11M	0.00	0.00	12,991.22	398.06	3,947.95	6,995,068.10	1,626,956.21	39° 31' 23.603 N	111° 32' 51.788 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,173.40	11,133.78	398.06	-570.27	KOP, 10.00°/100' Build
12,023.40	11,704.56	398.06	-47.25	Begin 85.00° Lateral
12,129.40	11,713.79	398.06	58.35	Begin 1.50°/100' Drop
13,129.67	11,929.71	398.06	1,032.11	Hold 70.00° Inc
16,232.73	12,991.22	398.06	3,947.95	PBHL

RECEIVED: Sep. 02, 2014

September 2, 2014

State of Utah,
Division of Oil Gas and Mining
ATTN: Brad Hill
P.O. Box 145801
Salt Lake City, Utah 84114

RE: Moroni 11M-1107
Township 15 South, Range 3 East, Section 11
Sanpete County, Utah

Dear Mr. Hill;

Whiting Oil and Gas Corporation (WPC) proposes to drill the Moroni 11M-1107 from a surface hole location of 700' FSL and 661' FWL of Section 11, T15S-R3E to a bottom hole location of 1061' FSL and 660' FEL of Section 11, T15S-R3E.

The Moroni 11M-1107 is covered by Statewide Spacing R649-3-2 which requires that no producing interval of the horizontal lateral be closer than 660' from the drilling unit boundaries, and requires proper surface and sub-surface authorization be obtained when the surface location is located off of the drilling unit.

In compliance with the above references rule, the top of the producing interval of the Moroni 11M-1107 will be 660' from the drilling unit boundary. A4-1/2" liner will be cemented in place and a marker joint will be set at 1098' FSL and 660' FWL of the unit indicating the western edge of the productive interval/legal setback. The productive interval with-in the legal setback of the drilling unit of the wellbore will be completed and produced.

Whiting Oil and Gas Corporation is the only owner and operator within 460 feet of the surface and target location as well as all points along the intended well bore path, and neither the surface nor target locations are within 460 feet of any uncommitted tracts or a unit boundary.

Based on WPC's compliance with the requirements of the set-back rules, WPC respectfully requests the approval of the submitted APD for the Moroni 11M-1107 well.

If you have any questions of require further information, please do not hesitate to contact the undersigned at 303-390-4095 or by e-mail at scottw@whiting.com. Your time and assistance in this matter is appreciated.

Sincerely,

Scott M. Webb

Regulatory and Permitting Manager

Whiting Oil and Gas Corporation

Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation
1700 Broadway, Suite 2300, Denver, Colorado 80290-2300 Office: 303.837.1661 Fax: 303.861.4023

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ SUBSEQUENT REPORT Date of Work Completion: 8/31/2014	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Monthly Status report

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

August 2014 operations: MIRU. Spud well 8/27/14 @ 3:00am. Drill 20" hole to 816'. Run 19 jts of 16" 65#, J-55 csg to 814' and cemented: Pumped 40 bbls tuned spacer, Lead Cement 315 sx, 11.5 ppg, 2.76 yield; Tail cement 265 sx, 13.5 ppg, 1.68 yield, and displaced with 178 bbl drilling mud. Cut off csg, test csg and annular. Drill 14" hole from 816 to 1434'.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
September 19, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	9/18/2014

RECEIVED: Sep. 18, 2014

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 366960	**Ship To #:** 366960	**Quote #:** 0021895074	**Sales Order #:** 0901620327
Customer: WHITING OIL & GAS CORP - EBUS		**Customer Rep:**	
Well Name: Moroni	**Well #:** 11M-1107		**API/UWI #:**
Field:	**City (SAP):** Manti	**County/Parish:** sanpete	**State:** UTAH
Legal Description:			
Contractor: PATTERSON-UTI ENERGY	**Rig/Platform Name/Num:** PATTERSON 303		
Job BOM: 7521			
Well Type: OIL & GAS WELL			
Sales Person: HALAMERICA\HX46524	**Srvc Supervisor:**		

Job

Formation Name				
Formation Depth (MD)	**Top**		**Bottom**	
Form Type			**BHST**	
Job depth MD	ft		**Job Depth TVD**	
Water Depth			**Wk Ht Above Floor**	
Perforation Depth (MD)	**From**		**To**	

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Open Hole Section			20				0	815		
Casing		16	15.25	65	STC	H-40	0	815		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	16	1		815		**Top Plug**	16	1	HES
Float Shoe	16	1		0		**Bottom Plug**	16	0	HES
Float Collar	16	1		768		**SSR plug set**	16	1	HES
Insert Float	16	1		0		**Plug Container**	16	1	HES
Stage Tool	16	1		0		**Centralizers**	16	0	HES

Miscellaneous Materials

Gelling Agt		**Conc**		**Surfactant**		**Conc**		**Acid Type**		**Qty**		**Conc**	
Treatment Fld		**Conc**		**Inhibitor**		**Conc**		**Sand Type**		**Size**		**Qty**	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water	40	bbl	8.33				

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	VariCem R1	VARICEM (TM) CEMENT	315	sack	11.5	2.76		6	16.75
0.1250 lbm		POLY-E-FLAKE (101216940)							

HALLIBURTON

Cementing Job Summary

0.25 lbm		KWIK SEAL, SK (100064010)							
Fluid #	**Stage Type**	**Fluid Name**	**Qty**	**Qty UoM**	**Mixing Density lbm/gal**	**Yield ft3/sack**	**Mix Fluid Gal**	**Rate bbl/min**	**Total Mix Fluid Gal**
3	VariCem R1	VARICEM (TM) CEMENT	265	sack	13.5	1.68		6	8.8
0.25 lbm		KWIK SEAL, SK (100064010)							
0.1250 lbm		POLY-E-FLAKE (101216940)							
Fluid #	**Stage Type**	**Fluid Name**	**Qty**	**Qty UoM**	**Mixing Density lbm/gal**	**Yield ft3/sack**	**Mix Fluid Gal**	**Rate bbl/min**	**Total Mix Fluid Gal**
4	Displacement Fluid	Displacement Fluid	178	bbl	9.1				
Fluid #	**Stage Type**	**Fluid Name**	**Qty**	**Qty UoM**	**Mixing Density lbm/gal**	**Yield ft3/sack**	**Mix Fluid Gal**	**Rate bbl/min**	**Total Mix Fluid Gal**
5	Type III	Premium Plus - Type III	0	sack	14.8	1.356		4	6.51
94 lbm		CMT - STANDARD TYPE III - FINE , BULK (100012229)							
2 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							

Cement Left In Pipe	**Amount**	47 ft	**Reason**	Shoe Joint
Comment				

HALLIBURTON

Summary Report

Crew:

Job Start Date: 8/29/2014

Sales Order #: 0901620327
WO #: 0901620327
PO/AFE #: NA

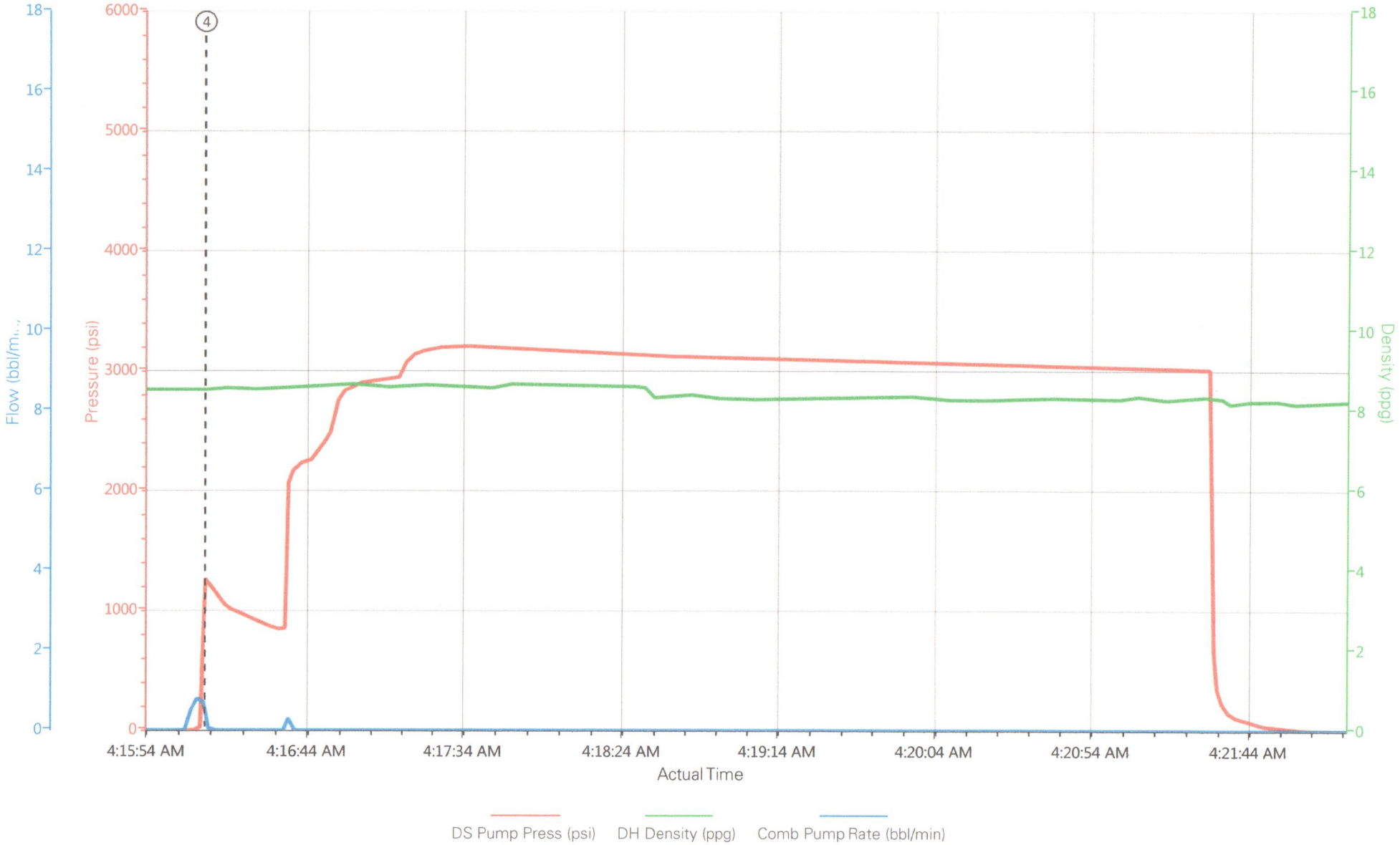
Customer:	WHITING OIL & GAS CORP - EBUS	**Field:**		**Job Type:**	CMT SURFACE CASING BOM
UWI / API Number:		**County/Parish:**	sanpete	**Service Supervisor:**	Benjamin Fuchs
Well Name:	Moroni	**State:**	UTAH		
Well No:	11M-1107	**Latitude:**			
		Longitude:		**Cust Rep Name:**	Braxton Plunkett
		Sect / Twn / Rng:	11/15/3	**Cust Rep Phone #:**	

Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

Sundry Number: 55764 API Well Number: 43039500050000

Job Summery Chart



① Start Job 3;0.18;0
② Prime Pumps 17;8.53;0
③ Other 4;6.17;1
④ Test Lines 1206;8.53;0
⑤ Pump Spacer 1 31;8.19;3.8
⑥ Pump Lead Cement 72;10.62;4
⑦ Pump Tail Cement 88;13.09;6
⑧ Shutdown -9;11.05;0
⑨ Drop Top Plug -11;10.98;0
⑩ Pump Displacement -5;11.89;0
⑪ Bump Plug 684;7.94;2.7
⑫ Check Floats 287;7.95;0
⑬ End Job -20;7.91;0

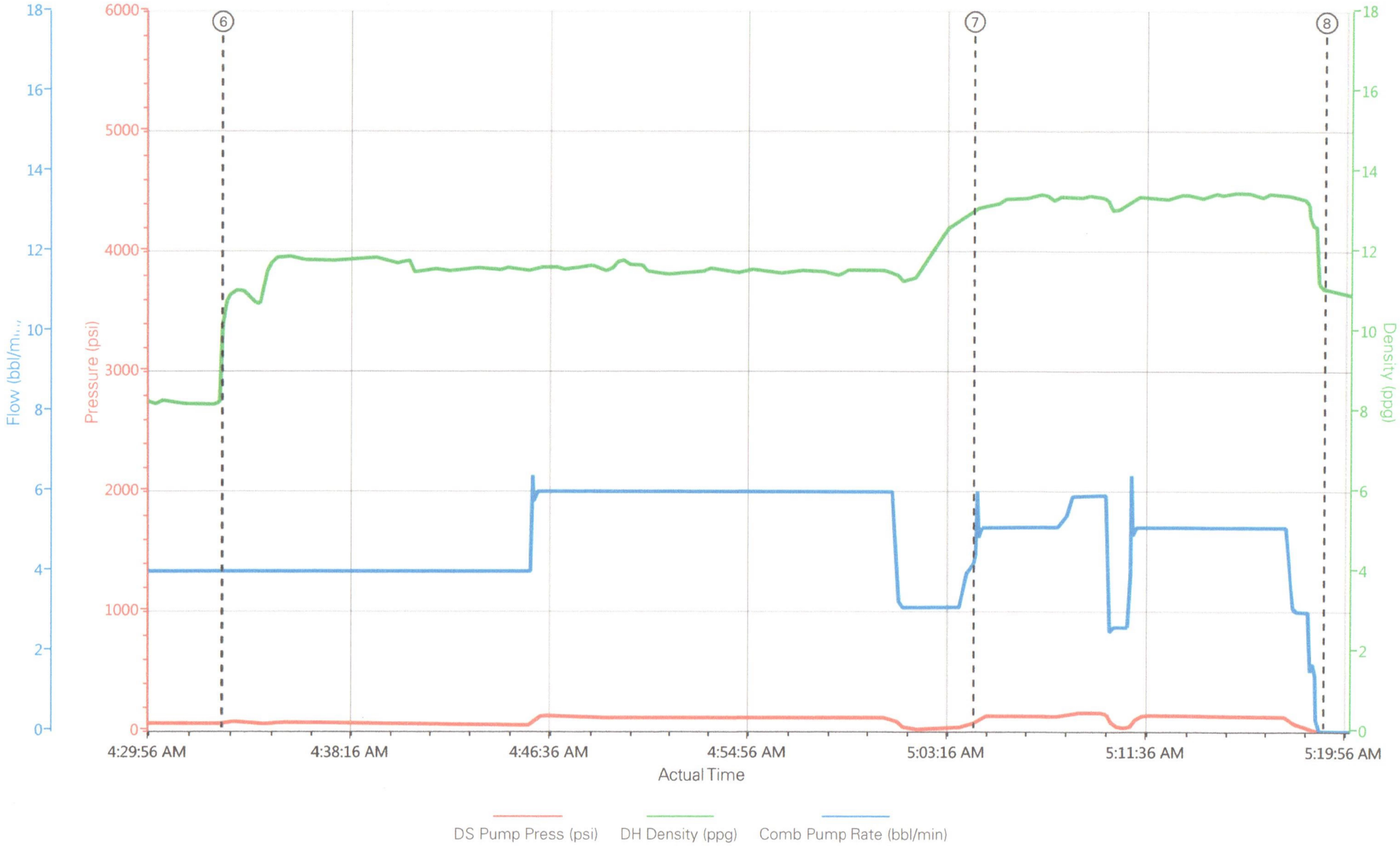
HALLIBURTON | iCem® Service

Created: 2014-08-29 03:21:38, Version: 3.0.121 Edit

Customer: WHITING OIL & GAS CORP - EBUS
Representative: Weston Eaves
Job Date: 8/29/2014 3:28:30 AM
Sales Order #: 901620327
Well: Moroni 11M-1107
Elite: 11189139

Sundry Number: 55764 API Well Number: 43039500050000

Job Summery Chart



① Start Job 3;0.18;0
② Prime Pumps 17;8.53;0
③ Other 4;6.17;1
④ Test Lines 1206;8.53;0
⑤ Pump Spacer 1 31;8.19;3.8
⑥ Pump Lead Cement 72;10.62;4
⑦ Pump Tail Cement 88;13.09;6
⑧ Shutdown -9;11.05;0
⑨ Drop Top Plug -11;10.98;0
⑩ Pump Displacement -5;11.89;0
⑪ Bump Plug 684;7.94;2.7
⑫ Check Floats 287;7.95;0
⑬ End Job -20;7.91;0

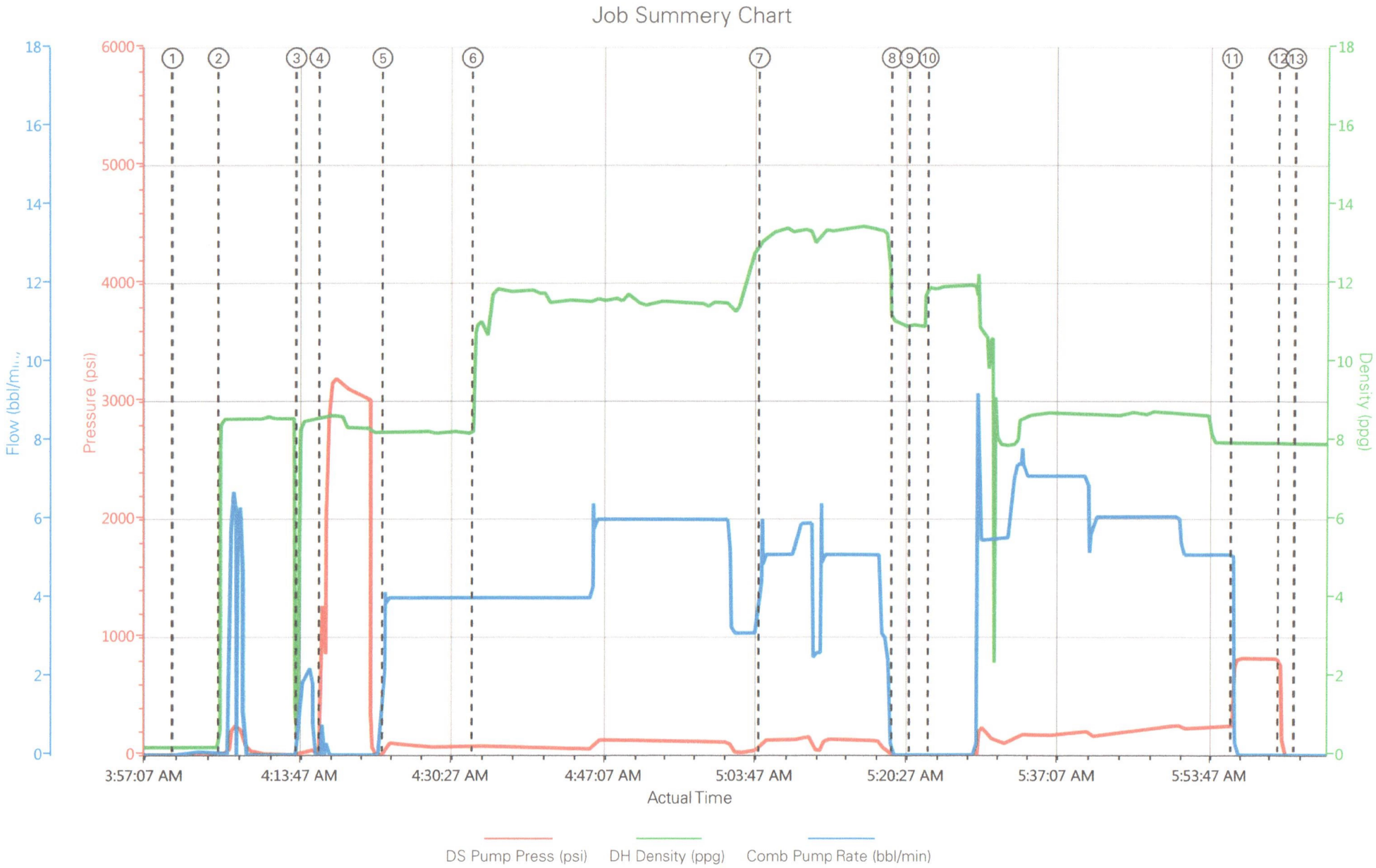
HALLIBURTON | iCem® Service

Created: 2014-08-29 03:21:38, Version: 3.0.121

Edit

Customer: WHITING OIL & GAS CORP - EBUS
Representative: Weston Eaves
Job Date: 8/29/2014 3:28:30 AM
Sales Order #: 901620327
Well: Moroni 11M-1107
Elite: 11189139

Sundry Number: 55764 API Well Number: 43039500050000



① Start Job 3;0.18;0
② Prime Pumps 17;8.53;0
③ Other 4;6.17;1
④ Test Lines 1206;8.53;0
⑤ Pump Spacer 1 31;8.19;3.8
⑥ Pump Lead Cement 72;10.62;4
⑦ Pump Tail Cement 88;13.09;6
⑧ Shutdown -9;11.05;0
⑨ Drop Top Plug -11;10.98;0
⑩ Pump Displacement -5;11.89;0
⑪ Bump Plug 684;7.94;2.7
⑫ Check Floats 287;7.95;0
⑬ End Job -20;7.91;0

HALLIBURTON | iCem® Service

Created: 2014-08-29 03:21:38, Version: 3.0.121 Edit

Customer: WHITING OIL & GAS CORP - EBUS
Job Date: 8/29/2014 3:28:30 AM
Well: Moroni 11M-1107
Representative: Weston Eaves
Sales Order #: 901620327
Elite: 11189139

HALLIBURTON

Cementing

Whiting - Patterson 303

Moroni# 11M-1107 - Surface

Job Procedure

Time	#	Event/Stage	Amount bbls	Rate bpm	Requested Quantity	Density ppg	Yield ft^3/sk	Water Rq. gal/sk	Total Water bbls
	1	Start Job	***Pre Pump Iron Inspection. Verify and communicate all valves are lined up to pump***						
	4	Fill Lines	3	3	3 bbls	8.33			3
	6	Pressure Test	3000 psi	***Reset Kick Outs to Maximum Job Pressure: 1000 psi***					
	9	Pump Water Spacer	40	4	40 bbls	8.33			40
	13	Pump Lead Cement	155	6	315 sks	11.5	2.76	16.77	126
	15	Pump Tail Cement	79	6	265 sks	13.5	1.68	8.8	56
	48	Shutdown/Wash Pumps/Drop Plug	Estimated Shutdown Time: 5 Minutes						
	23	Pump Mud Displacement	178	6	178 bbls	9.1			0
	4	Slow Rate	Last 10	3	***Adjust rates as needed for job***				
	26	Pressure to Land Plug	152 psi	***+ 500 psi over Final Circulating Pressure***					
	4	Check Floats	Estimated Job Pump Time		1.44 hrs		Total Water For Job (Including Wash Up)		274 bbls
	2	End Job							

1.6 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Comment
Event	1	Pre-Job Safety Meeting	Pre-job Safety Meeting	8/29/2014	03:45:30	USER	3.00	0.19	0.00	safety meeting with crew
Event	2	Start Job	Start Job	8/29/2014	04:00:32	COM12	3.00	0.18	0.00	
Event	3	Prime Pumps	Prime Pumps	8/29/2014	04:05:21	COM12	17.00	8.53	0.10	
Event	4	Other	Fill lines	8/29/2014	04:13:40	COM12	4.00	6.23	1.00	3 bbl water
Event	5	Test Lines	Test Lines	8/29/2014	04:16:13	COM12	1245.00	8.53	0.10	test to 3000psi
Event	6	Pump Spacer 1	Pump Spacer 1	8/29/2014	04:23:12	COM12	25.00	8.19	4.10	40bbl water
Event	7	Pump Lead Cement	Pump Lead Cement	8/29/2014	04:33:05	COM12	72.00	10.62	4.00	155bbl
Event	8	Pump Tail Cement	Pump Tail Cement	8/29/2014	05:04:32	COM12	88.00	13.09	6.00	79bbl
Event	9	Shutdown	Shutdown	8/29/2014	05:19:12	COM12	-9.00	11.05	0.00	wash up on top of plug
Event	10	Drop Top Plug	Drop Top Plug	8/29/2014	05:21:07	USER	-11.00	10.98	0.00	
Event	11	Pump Displacement	Pump Displacement	8/29/2014	05:23:12	COM12	-5.00	11.89	0.00	178bbl mud 9.1#
Event	12	Bump Plug	Bump Plug	8/29/2014	05:56:27	COM12	638.00	7.93	4.30	255 psi
Event	13	Check Floats	Check Floats	8/29/2014	06:01:45	USER	343.00	7.95	0.00	818 psi
Event	14	End Job	End Job	8/29/2014	06:03:29	COM12	-20.00	7.90	0.00	
Event	15	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/29/2014	06:05:31	USER	-20.00	7.89	0.00	safety meeting with crew

Sundry Number: 55764 API Well Number: 43039500050000

HALLIBURTON

Field Ticket

Original

Field Ticket Number:	0901620327	Field Ticket Date:	Friday, August 29, 2014	Planning Order #:	NA

Bill To:

WHITING OIL & GAS CORP - EBUS
DONOTMAIL-1700 BROADWAY
DENVER
80290

Ship To:

WHITING OIL & GAS CORP - EBUS
DONOTMAIL-1700 BROADWAY
DENVER
80290

Job Name:	Surface Casing
Order Type:	ZOH
Well Name:	Moroni 11M-1107
Company Code:	1100
Customer PO No.:	NA
Shipping Point:	Vernal, UT, USA
Sales Office:	Rocky Mountains BD
Well Type:	OIL & GAS WELL
Well Category:	Exploration
Rig Name/#:	PATTERSON 303

Material	Description	QTY	UOM	Unit Amount	Gross Amount	Discount	Net Amount
7521	CMT SURFACE CASING BOM	1.00	JOB	0.00	0.00		0.00
	Cement Equipment and Services						
2	MILEAGE FOR CEMENTING CREW *Number of Units*	370.00 1	MI	5.76	2,131.20	1,385.28	745.92
1	ZI-MILEAGE FROM NEAREST HES BASE,/UNIT *Number of Units*	370.00 1	MI	9.79	3,622.30	2,354.50	1,267.80
16091	ZI - PUMPING CHARGE *FEET/METERS (FT/M)* *DEPTH*	1.00 FT 815	EA	5,290.00	5,290.00	3,438.50	1,851.50
114	R/A DENSOMETER W/CHART RECORDER,/JOB,ZI *NUMBER OF UNITS*	1.00 1	JOB	1,285.00	1,285.00	835.25	449.75
139	ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI *ENTER FEET\METER\JOB\DAY* *NUMBER OF JOBS* *NUMBER OF UNITS*	1.00 JOB 1 1	JOB	2,275.00	2,275.00	1,478.75	796.25
130104	PORT. DATA ACQUIS. W/OPTICEM RT W/HES *DAYS OR PARTIAL DAY(WHOLE NO.)*	1.00 1	EA	2,549.00	2,549.00	1,656.85	892.15
74038	ZI PLUG CONTAINER RENTAL-1ST DAY *HR/DAY/WEEK/MTH/YEAR/JOB/RUN* *DAYS OR FRACTION (MIN1)*	1.00 1	EA	1,322.00	1,322.00	859.30	462.70
90	ZI QUICK LATCH ATTACHMENT *INCHES/MILLIMETERS (IN/MM)* *SIZE IN INCHES/MILLIMETER*	1.00 IN 16	JOB	732.00	732.00	475.80	256.20
7	ENVIRONMENTAL CHARGE,/JOB,ZI	1.00	JOB	134.00	134.00		134.00
8	IRON SAFETY INSPECTION SURCHARGE /JOB ZI	1.00	JOB	83.00	83.00		83.00
372867	Cmt PSL - DOT Vehicle Charge, CMT	5.00	EA	241.00	1,205.00		1,205.00
86954	ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON *Number of Units*	370.00 1	MI	0.23	85.10		85.10
86955	ZI FUEL SURCHG-HEAVY TRKS >1 1/2 TON *Number of Units*	370.00 1	MI	0.70	259.00		259.00
87605	FUEL SURCHG-CMT & CMT ADDITIVES *NUMBER OF TONS*	185.00 37.546	MI	0.23	1,597.58		1,597.58
	SubTotal				**22,570.18**	**12,484.23**	**10,085.95**
	Cementing Materials						
	Spacer						
	Lead Cement						
452009	CMT, VariCem (TM) cement	315.00	SK	0.00	22,015.12		7,705.29

HALLIBURTON

Field Ticket

Original

Field Ticket Number:	0901620327	Field Ticket Date:	Friday, August 29, 2014	Planning Order #:	NA

Bill To:
WHITING OIL & GAS CORP - EBUS
DONOTMAIL-1700 BROADWAY
DENVER
80290

Ship To:
WHITING OIL & GAS CORP - EBUS
DONOTMAIL-1700 BROADWAY
DENVER
80290

Job Name:	Surface Casing
Order Type:	ZOH
Well Name:	Moroni 11M-1107
Company Code:	1100
Customer PO No.:	NA
Shipping Point:	Vernal, UT, USA
Sales Office:	Rocky Mountains BD
Well Type:	OIL & GAS WELL
Well Category:	Exploration
Rig Name/#:	PATTERSON 303

Material	Description	QTY	UOM	Unit Amount	Gross Amount	Discount	Net Amount
101216940	CHEM, Pol-E-Flake, 25 lb bag *Poly-E-Flake*	40.00	LB	8.31	332.40	216.06	116.34
100064010	CHEM,KWIK SEAL,MEDIUM, 40 LB SACK *Kwik Seal*	79.00	LB	5.57	440.03	286.02	154.01
	Tail Cement						
452009	CMT, VariCem (TM) cement	265.00	SK	0.00	18,566.01		6,498.10
101216940	CHEM, Pol-E-Flake, 25 lb bag *Poly-E-Flake*	34.00	LB	8.31	282.54	183.65	98.89
100064010	CHEM,KWIK SEAL,MEDIUM, 40 LB SACK *Kwik Seal*	67.00	LB	5.57	373.19	242.57	130.62
	Top Out Cement (If Needed)						
3965	HANDLE&DUMP SVC CHRG, CMT&ADDITIVES,ZI *Unit of Measurement* *NUMBER OF EACH*	865.00 EA 1	CF	5.49	4,748.85	3,086.75	1,662.10
	SubTotal				**46,758.14**	**30,392.79**	**16,365.35**
101507884	Sugar, Granulated, 10 lb bag	40.00	LB	6.96	278.40	180.96	97.44
100003152	PLUG,CMTG,TOP,16 NOM,PLSTC,13.50	1.00	EA	2,483.00	2,483.00	1,613.95	869.05
76400	MILEAGE,CMT MTLS DEL/RET MIN *NUMBER OF TONS*	185.00 37.546	MI	3.35	23,269.13	15,124.93	8,144.20
100004528	CENTRALIZER ASSY - 16 CSG X 20 HOLE -	12.00	EA	374.00	4,488.00	2,917.20	1,570.80
45	SPEC EQUIP CHRG, NO PRICE ESTABLISHED ZI	1.00	EA	6,875.00	6,875.00		6,875.00
			Totals	*USD*	**106,721.85**	**62,714.06**	**44,007.79**

HALLIBURTON

Original

Field Ticket Signature

Field Ticket Number: 0901620327	Field Ticket Date: Friday, August 29, 2014	Planning Order #: NA

Bill To:
WHITING OIL & GAS CORP - EBUS
DONOTMAIL-1700 BROADWAY
DENVER
80290

Ship To:
WHITING OIL & GAS CORP - EBUS
DONOTMAIL-1700 BROADWAY
DENVER
80290

Job Name:	Surface Casing
Order Type:	ZOH
Well Name:	Moroni 11M-1107
Company Code:	1100
Customer PO No.:	NA
Shipping Point:	Vernal, UT, USA
Sales Office:	Rocky Mountains BD
Well Type:	OIL & GAS WELL
Well Category:	Exploration
Rig Name/#:	PATTERSON 303

THIS OUTPUT DOES NOT INCLUDE TAXES. APPLICABLE SALES TAX WILL BE BILLED ON THE FINAL INVOICE. CUSTOMER HEREBY ACKNOWLEDGES RECEIPT OF THE MATERIALS AND SERVICES DESCRIBED ABOVE , ON ANY PRECEDING PAGES, AND ATTACHED DOCUMENTS.

Gross Amount Total:	106,721.85
Item Discount Total:	62,714.06
Net Amount Total:	44,007.79 USD

Customer Representative Signature:

Date:

Customer Representative

Weston Eaves
Halliburton Representative

Was our HSE performance satisfactory? (Health, Safety, Environment)
☐ Yes ☐ No

Were you satisfied with our equipment?
☐ Yes ☐ No

Were you satisfied with our people?
☐ Yes ☐ No

Comments:

Customer Stamp (if applicable):

Moroni 11M-1107
AFE 14-1341
Code 810-14
Cost 44,007 79
MAA

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
CDW

X - Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **8/1/2014**

FROM: (Old Operator):	**TO:** (New Operator):
Skyline Operating Company, LLC N4140	Whiting Oil & Gas Corporation N2680
15174 Grove Drive	1700 BROADWAY STE 2300
Apline, UT 84004	Denver, CO 80290
807-376-1232	303-390-4252

CA No. **Unit:** N/A

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
MORONI 11M-1107	11	15S	3E	4303950005	19671	Fee	OW	DRL

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/10/2014
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/10/2014
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 9/16/2014

4a. Is the new operator registered in the State of Utah: _____ Business Number: 5890476-0143

5a. (R649-9-2)Waste Management Plan has been received on: Yes

5b. Inspections of LA PA state/fee well sites complete on: N/A

5c. Reports current for Production/Disposition & Sundries on: N/A

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM N/A BIA N/A
7. **Federal and Indian Units:**
   The BLM or BIA has approved the successor of unit operator for wells listed on: N/A
8. **Federal and Indian Communization Agreements ("CA"):**
   The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
9. **Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 9/17/2014
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 9/17/2014
3. Bond information entered in RBDMS on: 9/17/2014
4. Fee/State wells attached to bond in RBDMS on: 9/17/2014
5. Injection Projects to new operator in RBDMS on: N/A
6. Receipt of Acceptance of Drilling Procedures for APD/New on: 9/17/2014
7. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: 9/17/2014

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: N/A
2. Indian well(s) covered by Bond Number: N/A

3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number RLB0004585

3b. The **FORMER** operator has requested a release of liability from their bond on: Not Yet

LEASE INTEREST OWNER NOTIFICATION:

4. (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 9/17/2014

COMMENTS:

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: Moroni 11M-1107

2. NAME OF OPERATOR: SKYLINE OPERATING COMPANY, LLC

9. API NUMBER: 43039500050000

3. ADDRESS OF OPERATOR: 1517 Grove Drive , Alpine , UT, 84004 **PHONE NUMBER:** 807 376-1232 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY: SANPETE

STATE: UTAH

RECEIVED SEP 10 2014 DIV. OF OIL, GAS & MINING

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/1/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	✓ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Effective August 1, 2014 Skyline Operating Company, LLC resigned as Operator of the Moroni 11M-1107 and requests that the operator be designated and the referenced approved APD transferred from Skyline Operating Company, LLC to successor operator Whiting Oil & Gas, Corporation. Whiting Oil & Gas, Corporation will operate the well under the approved conditions and approved APD utilizing Utah Blanket Bond Number RLB0004585.

APPROVED
SEP 17 2014
DIV. OIL GAS & MINING
BY: Rachel Medina

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Don Hamilton Don Hamilton	435-650-3866	Permitting Agent
SIGNATURE N/A		**DATE** 9/4/2014

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: Fee

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
SKYLINE OPERTING COMPANY, llc

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1517 Grove Drive, Alpine, UT 84004

PHONE NUMBER:
807-376-1232

9. FIELD and POOL or WILDCAT:
UNDESIGNATED

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
700 FSL 661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: SLB&M

COUNTY:
SANPETE

STATE:
UTAH

RECEIVED
SEP 10 2014
DIV. OF OIL, GAS & MINING

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 08/18/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	✓ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Effective August 1, 2014 Skyline Operating Company, LLC resigned as Operator of the Moroni 11M-1107 and requests that the operator be designated and the referenced pending APD transferred from Skyline Operating Company, LLC to successor operator Whiting Oil & Gas, Corporation.
Whiting Oil & Gas, Corporation will operate the well under the approved conditions and submitted APD utilizing Utah Blanket Bond Number RLB0004585.

Whiting Oil & Gas Corporation

Scott Webb, Regulatory & Permitting Manager

APPROVED
SEP 17 2014
DIV. OIL GAS & MINING
BY: Rachel Medina

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jason Russon	807-376-1232	President
SIGNATURE		DATE 8/12/2014

RECEIVED: Aug. 02, 2014

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

Request to Transfer Application or Permit to Drill

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

Well name:	Moroni 11M-1107
API number:	43039500050000
Location:	Qtr-Qtr: **SWSW** Section: **11** Township: **15S** Range: **3E**
Company that filed original application:	Skyline Operating Company, LLC
Date original permit was issued:	08/06/2014
Company that permit was issued to:	Skyline Operating Company, LLC

Check one	Desired Action:
	Transfer pending (unapproved) Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
✔	**Transfer approved Application for Permit to Drill to new operator**
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	**Yes**	**No**
If located on private land, has the ownership changed?		✔
If so, has the surface agreement been updated?		
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		✔
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		✔
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		✔
Has the approved source of water for drilling changed?		✔
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?		✔
Is bonding still in place, which covers this proposed well? Bond No. RLB0004585	✔	

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Jason Ruson Title President

Signature Date 08/11/2014

Representing (company name) Skyline Operating Company, LLC

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

(3/2004)

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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.

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: Moroni 11M-1107

2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION

9. API NUMBER: 43039500050000

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY: SANPETE

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 9/30/2014	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Drilled from 1,434' - 4,800'. Log. Run 10-3/4" casing @ 4,794'.
Cement casing. Drill 4,800' - 9,947'.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
October 07, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician
SIGNATURE N/A		**DATE** 10/7/2014

RECEIVED: Oct. 07, 2014

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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.

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: Moroni 11M-1107

2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION

9. API NUMBER: 43039500050000

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY: SANPETE

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ✓ SUBSEQUENT REPORT — Date of Work Completion: 10/31/2014
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Monthly Status report

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

October Operations: Drilled 9-7/8" hole from 9,102' – 11,294'. Run 7-5/8" intermediate casing to 11,284' and cement. Drilled 6-1/2" hole from 11,294 – 11,301'. Cored 11,301' – 11,675'. Drilled 11,675' – 11,765'. Logged. Pumped 170 sack cement plug from 11,049' – 11,737'.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
November 04, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	11/3/2014

RECEIVED: Nov. 03, 2014

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 366960	**Ship To #:** 366960	**Quote #:** 0021896217	**Sales Order #:** 0901650648
Customer: WHITING OIL & GAS CORP - EBUS		**Customer Rep:** Mark Bercier	
Well Name: Moroni	**Well #:** 11M-1107	**API/UWI #:**	
Field:	**City (SAP):** Manti	**County/Parish:** sanpete	**State:** UTAH
Legal Description:			
Contractor: PATTERSON-UTI ENERGY	**Rig/Platform Name/Num:** PATTERSON 303		
Job BOM: 7522			
Well Type: OIL & GAS WELL			
Sales Person: HALAMERICA\HX46524	**Srvc Supervisor:** Benjamin Fuchs/Josh Bushman		

Job

Formation Name				
Formation Depth (MD)	**Top**		**Bottom**	
Form Type			**BHST**	
Job depth MD	4500ft		**Job Depth TVD**	
Water Depth			**Wk Ht Above Floor**	
Perforation Depth (MD)	**From**		**To**	

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		16	15.25	65	STC	H-40	0	800		
Casing		10.75	9.95	45.5	LTC	HCN80	0	4500		
Open Hole Section			14.75				800	4500		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	10.75	1		4500		**Top Plug**	10.75	1	HES
Float Shoe	10.75	1				**Bottom Plug**	10.75	1	HES
Float Collar	10.75	1				**SSR plug set**	10.75	1	HES
Insert Float	10.75	1				**Plug Container**	10.75	1	HES
Stage Tool	10.75	1				**Centralizers**	10.75	1	HES

Miscellaneous Materials

Gelling Agt		**Conc**		**Surfactant**		**Conc**		**Acid Type**		**Qty**		**Conc**	
Treatment Fld		**Conc**		**Inhibitor**		**Conc**		**Sand Type**		**Size**		**Qty**	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water	Fresh Water	0	bbl	8.33				

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal

HALLIBURTON

Cementing Job Summary

2	Super Flush 101	Super Flush 101	0	bbl	10				
500 gal/bbl		FRESH WATER							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Tune Spacer	Tune Spacer	40	bbl	12.1	3.11	19.5		

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	EconoCem	ECONOCEM (TM) SYSTEM	1505	sack	12.2	2.42	14.14	6	18.15

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
5	ExpandaCem	EXPANDACEM (TM) SYSTEM	400	sack	13.5	1.52	7.04	6	7.04

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
6	Displacement Fluid	Displacement Fluid	456	bbl	8.411.8				

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
7	Type III	Premium Plus - Type III		sack	14.8	1.356		4	6.51
94 lbm		CMT - STANDARD TYPE III - FINE , BULK (100012229)							
2 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							

Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint
Comment				

HALLIBURTON

Summary Report

Crew:

Job Start Date: 9/14/2014

Sales Order #: 0901650648
WO #: 0901650648
PO/AFE #: NA

Customer:	WHITING OIL & GAS CORP - EBUS	**Field:**		**Job Type:**	CMT INTERMEDIATE CASING BOM
UWI / API Number:		**County/Parish:**	sanpete	**Service Supervisor:**	Benjamin Fuchs/Josh Bushman
Well Name:	Moroni	**State:**	UTAH		
Well No:	11M-1107	**Latitude:**			
		Longitude:		**Cust Rep Name:**	Mark Bercier
		Sect / Twn / Rng:	11/15/3	**Cust Rep Phone #:**	

Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

1.6 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Comment
Event	1	Call Out	Call Out	9/13/2014	23:30:00	USER				
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/14/2014	02:00:00	USER				DISCUSSED DIRECTIONS TO LOCATION, DRIVING AT NIGHT, WILDLIFE ON ROADS, STEEP ROADS, DRIVING ON DIRT ROADS
Event	3	Depart Shop for Location	Depart Shop for Location	9/14/2014	02:15:00	USER				
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	9/14/2014	07:45:00	USER				
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	9/14/2014	08:00:00	USER				IDENTIFIED CATWALK, TRAILERS ON LOCATION, WATER HAULERS, CASING CREW, GUIDE WIRE, SPOT IN AREA
Event	6	Other	Other	9/14/2014	08:30:00	USER				SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	9/14/2014	09:20:00	USER				TALKED ABOUT USING GOOD COMMUNICATION WHEN WORKING WITH RIG CREW, TEAM LIFT, WORK SMARTER NOT HARDER, ONE PERSON WILL SIGNAL THE LOADER OPERATOR
Event	8	Rig-Up Equipment	Rig-Up Equipment	9/14/2014	09:35:00	USER				
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	9/14/2014	12:00:00	USER	0.00	8.57	0.00	COVERED JOB PROCEDURE, JSA, SWA, HIGH PRESSURE AWARENESS, STAY HYDRATED, LOCATION OF FIRST AID KITS, FIRE EXTINGUISHERS, MUSTER AREA, EMERGENCY CONTACT PHONE NUMBERS

Sundry Number: 57389 API Well Number: 43039500050000

Event	10	Other	Other	9/14/2014	12:46:32	COM13	-1.00	3.77	1.00	FILL PUMPS AND LINES 3 BBL FRESH WATER
Event	11	Test Lines	Test Lines	9/14/2014	12:51:17	COM13	4823.00	8.47	0.00	TEST KICK OUTS TO 500 PSI. TEST IRON TO 3500 PSI
Event	12	Check Weight	Check weight	9/14/2014	12:58:51	COM13	0.00	8.29	0.00	
Event	13	Pump Spacer 1	Pump Spacer 1	9/14/2014	12:59:29	COM13	1527.00	8.28	0.00	40 BBL 12.1# TUNE SPACER
Event	14	Check Weight	Check weight	9/14/2014	13:23:36	COM13	80.00	12.41	0.80	
Event	15	Pump Lead Cement	Pump Lead Cement	9/14/2014	13:26:54	COM13	221.00	12.39	6.00	649 BBL 12.2# LEAD CEMENT
Event	16	Check Weight	Check weight	9/14/2014	14:30:10	COM13	178.00	12.44	7.30	
Event	17	Check Weight	Check weight	9/14/2014	14:32:43	COM13	176.00	12.33	7.30	
Event	18	Pump Tail Cement	Pump Tail Cement	9/14/2014	15:17:48	COM13				109 BBL13.5# TAIL CEMENT
Event	19	Check Weight	Check weight	9/14/2014	15:19:32	COM13				
Event	20	Shutdown	Shutdown	9/14/2014	15:43:38	COM13	14.00	12.98	0.00	WASHUP PUMPS AND LINES ON TOP OF THE PLUG
Event	21	Drop Plug	Drop Plug	9/14/2014	15:43:47	COM13	14.00	12.98	0.00	
Event	22	Pump Displacement	Pump Displacement	9/14/2014	15:44:38	COM13	16.00	13.10	1.00	456 BBL MUD DISPLACEMENT. GOT 40 BBL TUNE SPACER BACK 456 BBL CEMENT TO SURFACE
Event	23	Bump Plug	Bump Plug	9/14/2014	17:33:30	COM13				FINAL CIRCULATING PRESSURE 1180 PSI PLUS 500 PSI OVER
Event	24	Check Floats	Check Floats	9/14/2014	17:37:00	USER	1571.00	7.95	0.00	FLOATS HELD. GOT 2 BBL BACK TO RCM
Event	25	End Job	End Job	9/14/2014	17:55:00	COM13				
Event	26	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	9/14/2014	18:00:00	USER	-4.00	7.99	0.00	TALKED ABOUT RIGGING DOWN FLOOR, USE TAG LINES, TEAM LIFT, DON" HURRY, STAY HYDRATED, WATCH FOOTING AND HAND PLACEMENT
Event	27	Rig-Down Equipment	Rig-Down Equipment	9/14/2014	18:15:00	USER	-5.00	8.05	0.00	

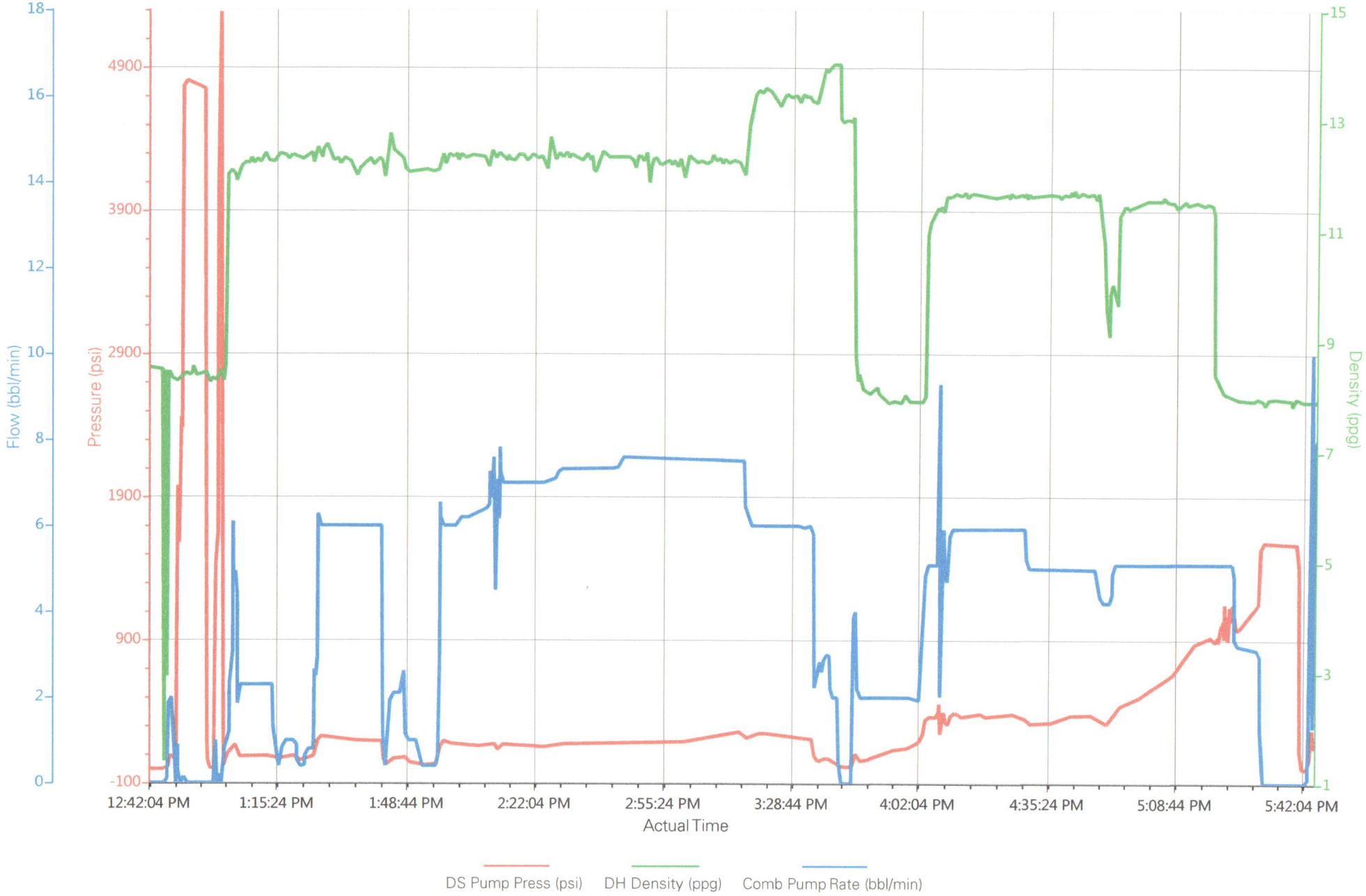
Sundry Number: 57389 API Well Number: 43039500050000

Event	28	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/14/2014	19:00:00	USER	TALKED ABOUT DRIVING WHEN TIRED, CONVOY ORDER, FOLLOWING DISTANCE, DUSTY ROADS,
Event	29	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	9/14/2014	19:15:00	USER	

Sundry Number: 57389 API Well Number: 43039500050000

Sundry Number: 57389 API Well Number: 43039500050000

WHITING 10.75" iNTERMEDIATE CASING 901650648



HALLIBURTON | iCem® Service

Created: 2014-09-14 09:40:37, Version: 4.0.248

Edit

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 366960	**Ship To #:** 3557328	**Quote #:** 0021895838	**Sales Order #:** 0901706515
Customer: WHITING OIL & GAS CORP - EBUS		**Customer Rep:**	
Well Name: MORONI	**Well #:** 11M-1107	**API/UWI #:** 43-039-50005-00	
Field: UNDESIGNATED	**City (SAP):** MOUNT PLEASANT	**County/Parish:** SANPETE	**State:** UTAH
Legal Description: SW SW-11-15S-3E-700FSL-661FWL			
Contractor: PATTERSON-UTI ENERGY	**Rig/Platform Name/Num:** PATTERSON 303		
Job BOM: 7522			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX46524	**Srvc Supervisor:**		

Job

Formation Name			
Formation Depth (MD)	**Top**	**Bottom**	
Form Type		**BHST**	
Job depth MD	11400ft	**Job Depth TVD**	
Water Depth		**Wk Ht Above Floor**	
Perforation Depth (MD)	**From**	**To**	

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		10.75	9.95	45.5	LTC	HCN80	0	4790		0
Casing		7.625	6.765	33.7	LTC	HCP110	0	11284		0
Open Hole Section			9.875				4790	11294	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	7.625	1		11284	Top Plug	7.625	1	HES
Float Shoe					Bottom Plug			
Float Collar	7.625	1		11238	SSR plug set			
Insert Float					Plug Container	7.625	1	HES
Stage Tool					Centralizers	7.625	70	HES

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Spacer III 11.3ppg	Tuned Spacer III	40	bbl	11.3	4.07			
35.35 gal/bbl		FRESH WATER							
137.07 lbm/bbl		BARITE, 100 LB SK (100003680)							

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	EconoCem V4	ECONOCEM (TM) SYSTEM	800	sack	11.7	2.37		4	12.65
5 lbm		KOL-SEAL, 50 LB BAG (100064232)							
13.76 Gal		FRESH WATER							
0.50 %		POLY-E-FLAKE (101216940)							
1 lbm		GRANULITE TR 1/4, 50 LB SK (100064073)							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	ExpandaCem V3	EXPANDACEM (TM) SYSTEM	320	sack	13.5	1.49		4	6.93
0.70 %		HR-5, 50 LB SK (100005050)							
0.50 lbm		POLY-E-FLAKE (101216940)							
6.93 Gal		FRESH WATER							
1 lbm		GRANULITE TR 1/4, 50 LB SK (100064073)							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement Fluid	Displacement Fluid	489	bbl	11.2				

Cement Left In Pipe	Amount	46 ft	Reason	Shoe Joint

Comment

HALLIBURTON

Summary Report

Crew:

Job Start Date: 10/17/2014

Sales Order #: 0901706515
WO #: 0901706515
PO/AFE #: NA

Customer:	WHITING OIL & GAS CORP - EBUS	Field:	UNDESIGNATED	Job Type:	CMT INTERMEDIATE CASING BOM
UWI / API Number:	43-039-50005-00	County/Parish:	SANPETE	Service Supervisor:	
Well Name:	MORONI	State:	UTAH		
Well No:	11M-1107	Latitude:	39.522251		
		Longitude:	-111.561739	Cust Rep Name:	
		Sect / Twn / Rng:	11/15/3	Cust Rep Phone #:	

Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

36.4 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Tub Height (ft)	Comb Pump Rate (bbl/min)	Water Valve Psn (%)	Mix Water Rate (gpm)	Mix Water Total (bbl)	Comment
Event	1	Call Out	Call Out	10/16/2014	16:30:00	USER						Requested on location at 03:30
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	10/16/2014	20:30:00	USER						
Event	3	Depart Shop for Location	Depart Shop for Location	10/16/2014	21:00:00	USER						
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	10/17/2014	01:30:00	USER						
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	10/17/2014	01:40:00	USER						
Event	6	Other	Spot Equipment	10/17/2014	02:00:00	USER						Spot Equipment
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/17/2014	02:20:00	USER						
Event	8	Rig-up Lines	Rig-up Lines	10/17/2014	02:30:00	USER						
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/17/2014	07:00:00	USER						
Event	10	Rig-up Lines	Rig-up Lines	10/17/2014	07:15:00	USER						Rig up floor, plug load witnessed by driller as assigned by company man.
Event	11	Prime Pumps	Prime Pumps	10/17/2014	07:43:48	USER						Prime up RCM, then Mix up Spacer.
Event	12	Other	Fill Lines	10/17/2014	08:15:57	USER						1.5 bbls to fill lines for pressure test.
Event	13	Test Lines	Start Pressure Test	10/17/2014	08:21:47	USER						Test pump & lines 5000 psi.
Event	14	Test Lines	End Pressure Test	10/17/2014	08:24:46	USER						Test good - no visible leaks on the iron.
Event	15	Pump Spacer	Pump Tuned Spacer	10/17/2014	08:27:15	USER						40 bbls Tuned Spacer III @ 11.3 ppg.
Event	16	Pump Lead Cement	Pump Lead Cement	10/17/2014	08:36:26	USER						338 bbls Lead cement @ 11.7 ppg. Getting good returns.
Event	17	Pump Tail Cement	Pump Tail Cement	10/17/2014	09:35:10	USER						85 bbls Tail cement @ 13.5

Sundry Number: 57389 API Well Number: 43039500050000

							ppg.
Event	18	Shutdown	Shutdown / Drop Plug	10/17/2014	09:54:13	USER	Witnessed by driller.
Event	19	Pump Displacement	Pump Displacement	10/17/2014	09:57:44	USER	Washup on plug - 489.2 bbls calculated mud displacement.
Event	20	Slow Rate	Slow Rate	10/17/2014	10:00:53	USER	Slow Rate to keep pressure down.
Event	21	Slow Rate	Slow Rate	10/17/2014	10:58:46	USER	Slow Rate @ 360 bbls away
Event	22	Slow Rate	Slow Rate	10/17/2014	11:07:49	USER	Slow rate @ 400 bbls away
Event	23	Slow Rate	Slow Rate	10/17/2014	11:23:57	USER	Slow rate to bump plug @ 470 bbls away.
Event	24	Bump Plug	Bump Plug	10/17/2014	11:26:19	USER	Final circulating pressure = 950 psi. Pressure up to 1442 psi.
Event	25	Check Floats	Check Floats	10/17/2014	11:27:44	USER	Floats held - 2.5 bbls back. No cement to surface as designed.
Event	26	Pressure Up Well	Start Casing Test	10/17/2014	11:32:58	USER	1000 psi for 30 min.
Event	27	Pressure Up Well	End Casing Test	10/17/2014	12:03:45	USER	Test good - gain 200 psi over 30 min.
Event	28	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/17/2014	12:05:00	USER	
Event	29	Rig-Down Equipment	Rig-Down Equipment	10/17/2014	12:05:01	USER	Blow down 1600 field bin.
Event	30	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	10/17/2014	14:00:00	USER	

Sundry Number: 57389 API Well Number: 43039500050000

37.0 Attachments

37.1 Pressure test.png

Sundry Number: 57389 API Well Number: 43039500050000

37.2 Job Summery.png

Sundry Number: 57389 API Well Number: 43039500050000

2141

HALLIBURTON

WHITING OIL & GAS CORP - EBUS
901706515
Whiting - Moroni# 11M-1107 - Intermediate

37.3 Job Summery no events.png

HALLIBURTON | iCem® Service

Created: 2014-10-16 16:57:40 Version: 4.0.248 Edit

Customer: WHITING OIL & GAS CORP - EBUS
Representative: Mark Bercier

Job Date: 10/16/2014 6:52:48 PM
Sales Order #: 901706515

Well: Moroni# 11M-1107
Elite #: 11189139

Sundry Number: 57389 API Well Number: 43039500050000

37.4 Casing test.png

Sundry Number: 57389 API Well Number: 43039500050000

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 366960	**Ship To #:** 3557328	**Quote #:** 0021896125	**Sales Order #:** 0901787248
Customer: WHITING OIL & GAS CORP - EBUS		**Customer Rep:**	
Well Name: MORONI	**Well #:** 11M-1107		**API/UWI #:** 43-039-50005-00
Field: UNDESIGNATED	**City (SAP):** MOUNT PLEASANT	**County/Parish:** SANPETE	**State:** UTAH
Legal Description: SW SW-11-15S-3E-700FSL-661FWL			
Contractor: PATTERSON-UTI ENERGY		**Rig/Platform Name/Num:** PATTERSON 303	
Job BOM: 7530			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX46524		**Srvc Supervisor:**	

Job

Formation Name				
Formation Depth (MD)	**Top**		**Bottom**	
Form Type			**BHST**	
Job depth MD	11765ft		**Job Depth TVD**	
Water Depth			**Wk Ht Above Floor**	3
Perforation Depth (MD)	**From**		**To**	

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		7.625	6.765	33.7	LTC	HCP110	0	11285		
Drill Pipe		4	3.34	14			0	11745		
Open Hole Section			6.5				11285	11765		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	4					Top Plug	4		HES
Float Shoe	4					Bottom Plug	4		HES
Float Collar	4					SSR plug set	4		HES
Insert Float	4					Plug Container	4		HES
Stage Tool	4					Centralizers	4		HES

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Spacer III	Tuned Spacer III	28	bbl	12.5			3.5	
34.60 gal/bbl		FRESH WATER							
206.23 lbm/bbl		BARITE, 100 LB SK (100003680)							

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	HalCem	HALCEM (TM) SYSTEM	170	sack	15.8	1.51		3.5	6.18
35 %		SS-200 - BULK (102240841)							
6.30 Gal		FRESH WATER							
0.70 %		HR-601, 50 LB BAG (101328348)							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Tuned Spacer III	Tuned Spacer III	12	bbl	12.5			3.5	
206.23 lbm/bbl		BARITE, 100 LB SK (100003680)							
34.60 gal/bbl		FRESH WATER							

Cement Left In Pipe	Amount		Reason	
Comment				

HALLIBURTON

Summary Report

Crew:

Job Start Date: 10/30/2014

Sales Order #: 0901787248
WO #: 0901787248
PO/AFE #: NA

Customer:	WHITING OIL & GAS CORP - EBUS	Field:	UNDESIGNATED	Job Type:	CMT PLUG BACK BOM
UWI / API Number:	43-039-50005-00	County/Parish:	SANPETE	Service Supervisor:	
Well Name:	MORONI	State:	UTAH		
Well No:	11M-1107	Latitude:	39.522251		
		Longitude:	-111.561739	Cust Rep Name:	
		Sect / Twn / Rng:	11/15/3	Cust Rep Phone #:	

Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

1.6 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comment
Event	1	Arrive at Location from Service Center	Arrive at Location from Service Center	10/30/2014	18:00:00	USER				Crew arrived safely on location. Conducted a site assesment.
Event	2	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/30/2014	18:15:00	USER				Crew conducted a pre rig up safety meeting to go over the hazards.
Event	3	Rig-Up Equipment	Rig-Up Equipment	10/30/2014	18:30:00	USER	51.00	0.12	0.00	Crew spotted the equipment and began rigging up.
Event	4	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/30/2014	19:15:00	USER	49.00	8.41	0.00	Crew met with the rig crew and company man to go over the job procedure and safety procedures associated with the job.
Event	5	Other	Other	10/30/2014	19:34:36	COM1	46.00	8.41	0.00	Filled Lines for Pressure Test.
Event	6	Test Lines	Test Lines	10/30/2014	19:39:09	COM1	5616.00	8.51	0.00	Tested lines to 5000 psi.
Event	7	Pump Spacer 1	Pump Spacer 1	10/30/2014	19:50:07	COM1	949.00	11.22	4.00	Pumped 28 bbls of Tuned Spacer at 12.5 ppg.
Event	8	Pump Cement	Pump Cement	10/30/2014	19:57:18	USER	561.00	14.60	3.30	Pumped 170 sks (46 bbls) of Primary Cement at 15.8 ppg.
Event	9	Pump Spacer 1	Pump Spacer 1	10/30/2014	20:09:56	COM1	157.00	14.75	3.50	Pumped 12 bbls of Tuned Spacer at 12.5 ppg.
Event	10	Pump Displacement	Pump Displacement	10/30/2014	20:13:55	COM1	80.00	8.38	3.50	Pumped 10 bbls of Fresh Water.
Event	11	Pump Displacement	Pump Displacement	10/30/2014	20:16:37	USER	95.00	10.77	4.00	Pumped 70 bbls of Mud Displacement.
Event	12	Shutdown	Shutdown	10/30/2014	20:32:59	COM1	130.00	11.40	0.00	Shutdown. Rig began pulling 7 stands before circulating the well.
Event	13	End Job	End Job	10/30/2014	20:35:00	COM1	46.00	11.43	0.00	Job Complete, Crew Released.

Sundry Number: 57389 API Well Number: 43039500050000

Event	14	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/30/2014	20:45:00	USER	55.00	11.62	0.00	Crew conducted a pre rig down safety meeting to go over the hazards.
Event	15	Rig-Down Equipment	Rig-Down Equipment	10/30/2014	20:50:00	USER	46.00	11.74	0.00	Crew rigged down the lines and equipment.
Event	16	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	10/30/2014	22:00:00	USER				Crew departed from location.

Sundry Number: 57389 API Well Number: 43039500050000

HALLIBURTON

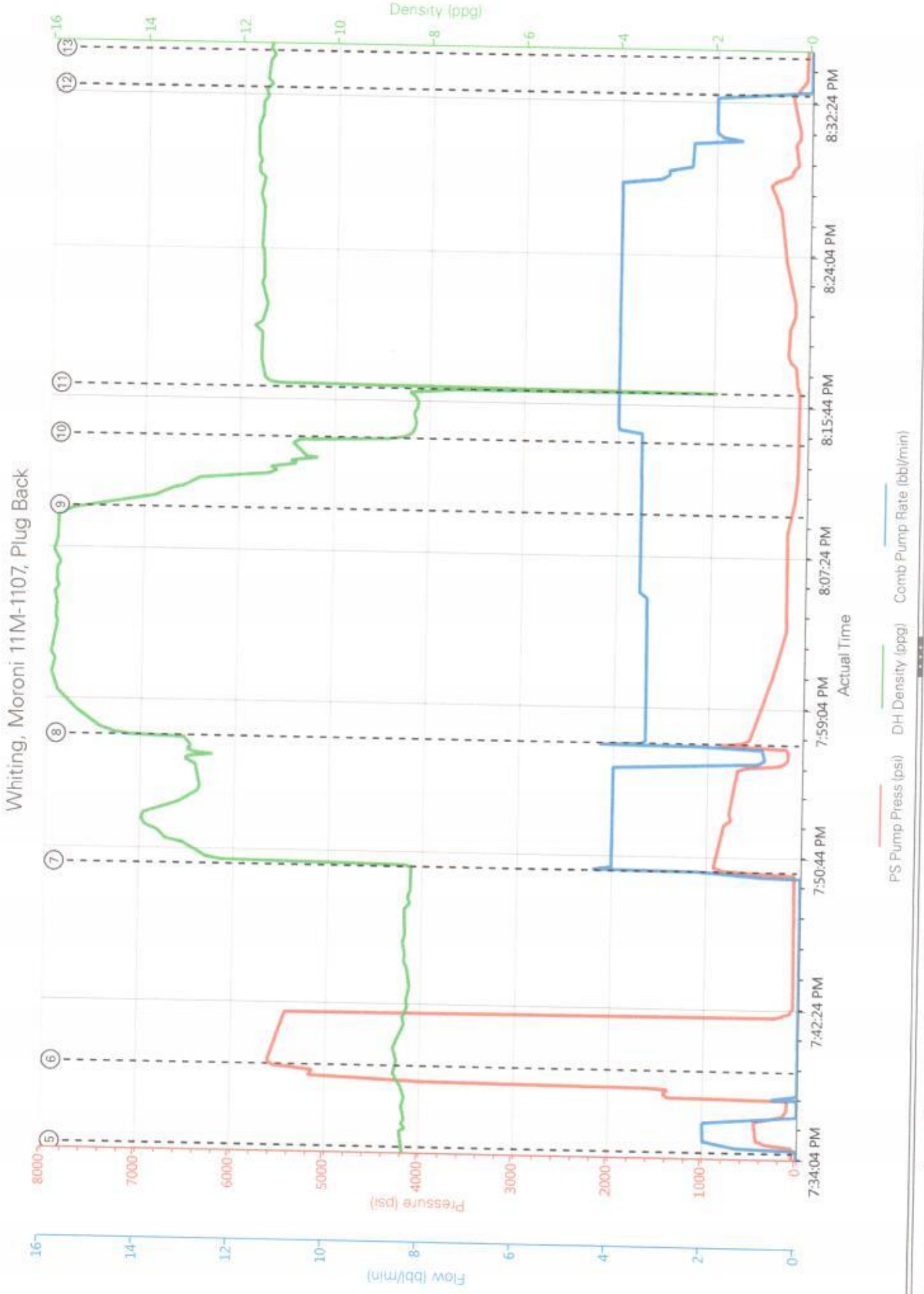
Cementing

Whiting 6 1/2" Plug

10-30-2014 SO# 901787248 Moroni 11M-1107

Job Procedure

Time	#	Event/Stage	Amount bbls	Rate bpm	Requested Quantity	Density ppg	Yield ft^3/sk	Water Rq. gal/sk	Total Water bbls
	1	Start Job	***Pre Pump Iron Inspection. Verify and communicate all valves are lined up to pump***						
	4	Fill Lines	3	2	3 bbls	8.33			3
	6	Pressure Test	5000 psi	***Reset Kick Outs to Maximum Job Pressure: 2500 psi***					
	10	Pump Tuned Spacer	28	4	28 bbls	12.5			28
	14	Pump Primary Cement	46	4	170 sks	15.8	1.51	6.18	25
	10	Pump Tuned Spacer	12	4	12 bbls	12.5			12
	23	Pump Well Fluid Displacement	85	4	85 bbls	11.5			0
	2	End Job	Est. Job Pump Time		0.38 hrs		Total Water (bbls)		118


Whiting, Moroni 11M-1107, Plug Back
Density (ppg)
Pressure (psi)
Flow (bbl/min)
Actual Time
7:34:04 PM
7:42:24 PM
7:50:44 PM
7:59:04 PM
8:07:24 PM
8:15:44 PM
8:24:04 PM
8:32:24 PM
PS Pump Press (psi)
DH Density (ppg)
Comb Pump Rate (bbl/min)
HALLIBURTON | iCem® Service
Created: 2014-10-30 18:23:00, Version: 3.0.121
Edit
Customer: WHITING OIL & GAS CORP - EBUS
Representative: KC Smith
Job Date: 10/30/2014 6:25:29 PM
Sales Order #: 901787248
Well: 11M-1107
Elite #: 10872435

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  11/30/2014
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Status Update

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

RIH with wireline. Clean tanks. RIH with whipstock. Slide drill 11,270-11,355'. TIH with whipstock. Run gyrodata. Mill. TOOOH. Fishing. Set whipstock. Mill. Drill 11,100-16,197'. TD.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 05, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	1/2/2015

RECEIVED: Jan. 02, 2015

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 366960	**Ship To #:** 3557328	**Quote #:** 0021895253	**Sales Order #:** 0901873487
Customer: WHITING OIL & GAS CORP - EBUS		**Customer Rep:** MARK	
Well Name: MORONI	**Well #:** 11M-1107	**API/UWI #:** 43-039-50005-00	
Field: UNDESIGNATED	**City (SAP):** MOUNT PLEASANT	**County/Parish:** SANPETE	**State:** UTAH
Legal Description: SW SW-11-15S-3E-700FSL-661FWL			
Contractor: PATTERSON-UTI ENERGY	**Rig/Platform Name/Num:** PATTERSON 303		
Job BOM: 7525			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX46524	**Srvc Supervisor:** Craig Kukus		

Job

Formation Name			
Formation Depth (MD)	Top	Bottom	
Form Type		BHST	
Job depth MD	16187ft	Job Depth TVD	16187 FT
Water Depth		Wk Ht Above Floor	8 FT
Perforation Depth (MD)	From	To	

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Drill Pipe		4	3.34	14			0	11000	0	11000
Casing		7.625	6.765	33.7	LTC	HCP110	0	11400	0	11400
Casing		4.5	3.826	15.1	LTC	P-110	11000	15656	11000	12980
Open Hole Section			6.5				11400	15656	11400	12980

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	4.5			15656		Top Plug	4.5		HES
Float Shoe	4.5					Bottom Plug	4.5		HES
Float Collar	4.5					SSR plug set	4.5		HES
Insert Float	4.5					Plug Container	4.5		HES
Stage Tool	4.5					Centralizers	4.5		HES

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Spacer III	Tuned Spacer III	40	bbl	13			3.5	
34.60 gal/bbl		FRESH WATER							
229.38 lbm/bbl		BARITE, 100 LB SK (100003680)							

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	ExpandaCem	EXPANDACEM (TM) SYSTEM	380	sack	13.5	1.77		3.5	8.32
0.1250 lbm		POLY-E-FLAKE (101216940)							
0.50 %		D-AIR 5000, 50 LB SACK (102068797)							
20 %		SS-200 - BULK (102240841)							
8.47 Gal		FRESH WATER							
0.90 %		HR-601, 50 LB BAG (101328348)							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Displacement Fluid	Displacement Fluid	179	bbl	8.4			4/3.5/ 2	

Cement Left In Pipe	Amount	47 ft	Reason		Shoe Joint
Mix Water:	pH ##	Mix Water Chloride:	0 ppm	Mix Water Temperature:	68°F °C
Cement Temperature:	68 °F °C	Plug Displaced by:	8.33lb/gal kg/m3 XXXX	Disp. Temperature:	## °F °C
Plug Bumped?	Yes	Bump Pressure:	4340 psi MPa	Floats Held?	Yes
Cement Returns:	20 bbl m3	Returns Density:	## lb/gal kg/m3	Returns Temperature:	## °F °C
Comment					

HALLIBURTON

Summary Report

Crew:

Job Start Date: 12/3/2014

Sales Order #: 0901873487
WO #: 0901873487
PO/AFE #: NA

Customer:	WHITING OIL & GAS CORP - EBUS	Field:	UNDESIGNATED	Job Type:	CMT PRODUCTION LINER BOM
UWI / API Number:	43-039-50005-00	County/Parish:	SANPETE	Service Supervisor:	Craig Kukus
Well Name:	MORONI	State:	UTAH		
Well No:	11M-1107	Latitude:	39.522251		
		Longitude:	-111.561739	Cust Rep Name:	MARK
		Sect / Twn / Rng:	11/15/3	Cust Rep Phone #:	2816174466

Remarks:

The Information Stated Herein Is Correct	Customer Representative Signature	Date
	Customer Representative Printed Name	

3.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	Call Out	12/2/2014	05:30:00	USER					CREW CALL OUT
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	12/2/2014	09:30:00	USER					PRE-DEPART SAFETY MEETING
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	12/2/2014	16:00:00	USER					ARRIVE ON LOC RIG RUNNING DP / HES EQUIPMENT ON LOC 1 EA CEMENT PUMP UNIT 2 EA 660 BULK UNITS 1 EA SERVICE PICK UP UNIT
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	12/2/2014	16:20:00	USER					ASSESMENT WALK THRU OF LOC ALL HES PRESENT
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/2/2014	19:00:00	USER					PRE-RIG UP SAFETY MEETING ALL HES CREW PRESENT
Event	6	Rig-Up Equipment	Rig-Up Equipment	12/2/2014	19:10:00	USER					RIG UP IRON TO BUFFER ZONE / RIG UP SUCTION HOSES TO FRESH WATER
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/2/2014	23:00:00	USER					PRE-JOB SAFETY MEETING ALL RIG PERSONEL AND HES CREW PRESENT / RIG FINISHING CIRCULATING WELL
Event	8	Start Job	Start Job	12/3/2014	00:10:10	COM6	8.37	0.00	16.00	15.6	START JOB PRE- MIX TUNED SPACER
Event	9	Start Job	Start Job	12/3/2014	01:48:26	COM6	12.92	0.00	6.00	0.0	START JOB TD 16197 FT TP 16187 FT CSG 5197.27 FT 14# DP 8196 FT 28# DP 2760 FT OH 6 1/8 IN HANGER SET AT 10956 FT WF/WT 12.7# OBM
Event	10	Prime Pumps	Prime Pumps	12/3/2014	01:48:55	USER	13.73	0.90	4.00	0.1	PRIME LINES
Event	11	Test Lines	Test Lines	12/3/2014	02:02:38	COM6	9.25	0.00	5138.00	8.1	PRESSURE TEST LINES 5 TH GEAR STALL OUT AT 2880

Sundry Number: 59349 API Well Number: 43039500050000

											PSI TEST TO 5100 PSI
Event	12	Pump Spacer 1	Pump Spacer 1	12/3/2014	02:08:29	COM6	13.07	2.90	797.00	1.2	PUMP 32 BBLS TUNED SPACER AT 13 PPG 2.49 Y 14.6 GAL/SKS HAVE RETURNS
Event	13	Pump Cement	Pump Cement	12/3/2014	02:20:35	USER	13.73	3.40	1123.00	35.5	PUMP LINER CEMENT 380 SKS AT 13.5 PPG 1.77 Y 8.32 GAL/SKS HAVE RETURNS
Event	14	Shutdown	Shutdown	12/3/2014	02:56:07	USER	13.06	0.00	280.00	123.2	SHUT DOWN END CEMENT / SWAP LINES TO WASH UP
Event	15	Clean Lines	Clean Lines	12/3/2014	02:57:06	COM6	10.00	0.00	11.00	123.2	WASH LINES
Event	16	Drop Top Plug	Drop Top Plug	12/3/2014	03:03:07	COM6	8.61	0.00	6.00	0.0	DROP TOP PLUG / PLUG AWAY
Event	17	Pump Displacement	Pump Displacement	12/3/2014	03:03:18	COM6	8.56	1.90	12.00	0.2	PUMP H20 DISPLACEMENT WITH SUGAR WATER AHEAD
Event	18	Pump Spacer 2	Pump Spacer 2	12/3/2014	03:25:54	USER	12.08	3.50	2572.00	72.6	PUMP TUNED SPACER BEHIND 8 BBLS
Event	19	Pump Displacement	Pump Displacement	12/3/2014	03:28:40	USER	8.36	3.40	2617.00	82.2	BACK ON H20 DISPLACEMENT
Event	20	Bump Plug	Bump Plug	12/3/2014	04:16:27	COM6	8.27	0.00	4318.00	178.4	PLUG LANDED AT 3540 PSI BUMP TO 4340 PSI
Event	21	Check Floats	Check Floats	12/3/2014	04:18:21	USER	8.18	0.00	56.00	178.4	CHECK FLOATS / GOT BACK 1.5 BBLS
Event	22	Pump Water	Pump Water	12/3/2014	05:03:26	USER	8.15	0.00	18.00	178.4	SWAP LINES PUMP H20 TO CLEAR WELL
Event	23	Shutdown	Shutdown	12/3/2014	06:04:30	USER	8.19	0.70	166.00	358.3	SHUT DOWN END CIRCULATING WELL CLEAN / PUMPED 350 BBLS GOT 40 BBLS TUNED SPACER BACK AND 20 BBLS CEMENT FOLLOWED WITH 30 BBLS FRESH WATER
Event	24	End Job	End Job	12/3/2014	06:05:11	COM6					END JOB / HAD RETURNS THRU OUT THE JOB
Event	25	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/3/2014	06:10:14	USER	8.15	0.00	32.00	358.3	PRE- RIG DOWN SAFETY MEETING ALL HES CREW

Sundry Number: 59349 API Well Number: 43039500050000

											PRESENT
Event	26	Rig-Down Equipment	Rig-Down Equipment	12/3/2014	06:15:00	USER	8.14	0.00	36.00	358.3	RIG DOWN EQUIPMENT AND WASH UP PUMP
Event	27	Depart Location	Depart Location	12/3/2014	07:05:00	USER					DEPART LOC SAFETY MEETING ALL HES PRESENT
Event	28	Comment	Comment	12/3/2014	07:25:00	USER					THANK YOU FOR USING HALLIBURTON CEMENTING SERVICES AND THE CREW OF CRAIG KUKUS

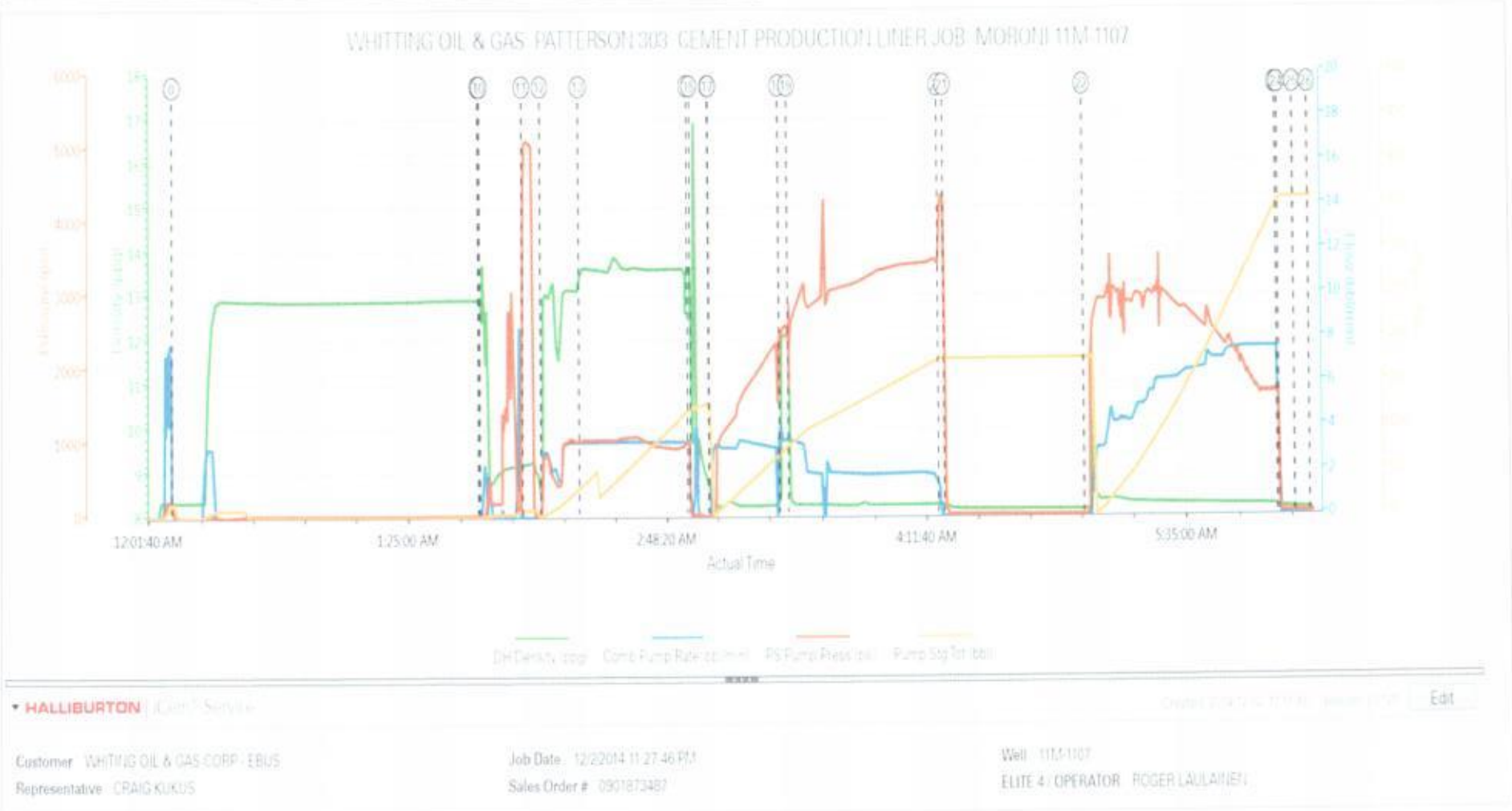
Sundry Number: 59349 API Well Number: 4303950005000

4.0 Attachments

4.1 WHITTING OIL & GAS-Custom Results1.png

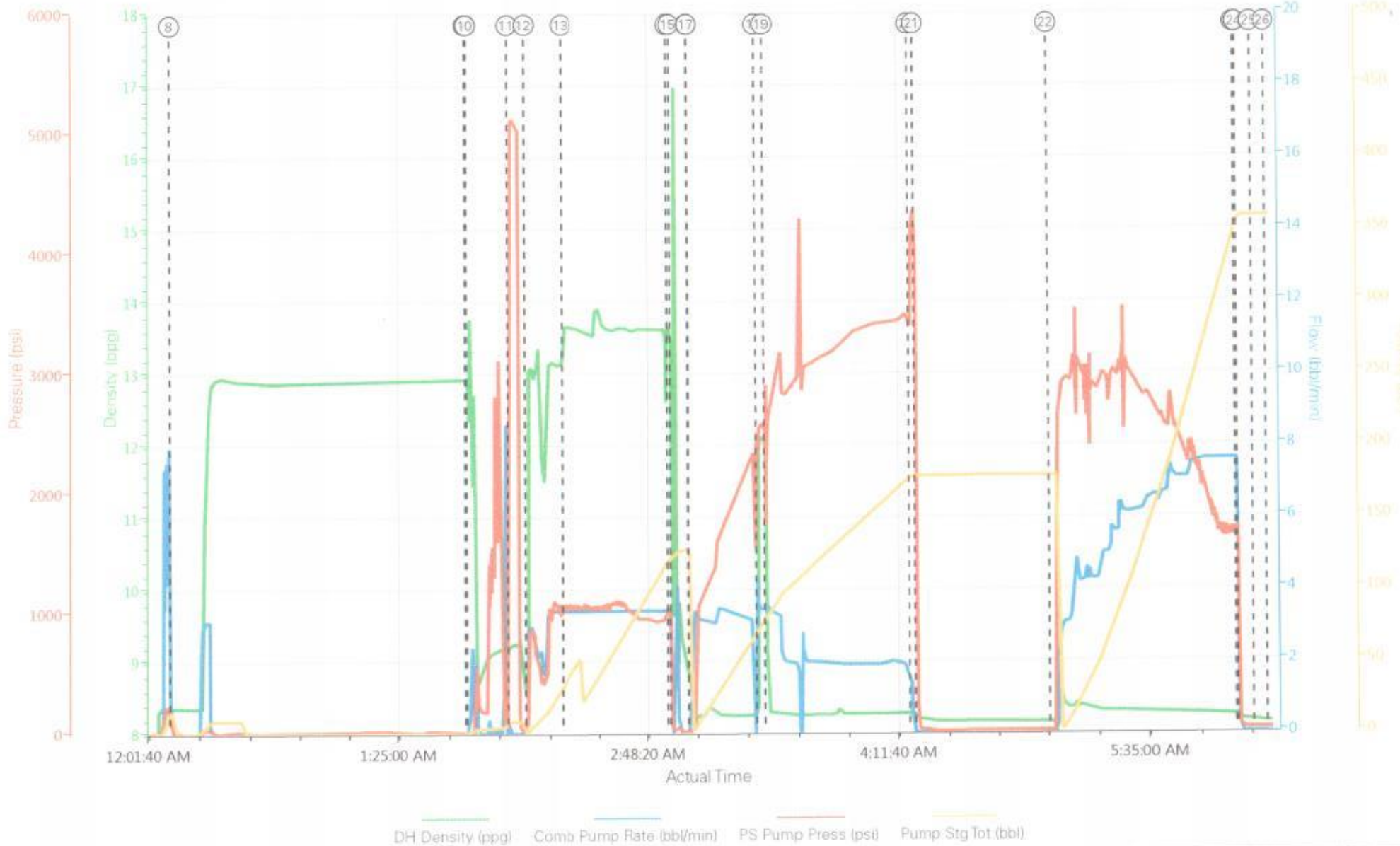
Sundry Number: 59349 API Well Number: 43039500050000

4.2 WHITTING OIL & GAS-Custom Results2.png



Sundry Number: 59349 API Well Number: 43039500050000

WHITTING OIL & GAS PATTERSON 303 CEMENT PRODUCTION LINER JOB MORONI 11M-1107



Call Out	⑥ Rig-Up Equipment	⑪ Test Lines	⑯ Drop Top Plug	21 Check Floats	26 Rig-Down Equipment
Depart from Service Center or Other Site	⑦ Pre-Job Safety Meeting	⑫ Pump Spacer 1	⑰ Pump Displacement	22 Pump Water	27 Depart Location
Arrive at Location from Service Center	⑧ Start Job	⑬ Pump Cement	⑱ Pump Spacer 2	23 Shutdown	28 Comment
Assessment Of Location Safety Meeting	⑨ Start Job	⑭ Shutdown	⑲ Pump Displacement	24 End Job	
Pre-Rig Up Safety Meeting	⑩ Prime Pumps	⑮ Clean Lines	20 Bump Plug	25 Pre-Rig Down Safety Meeting	

HALLIBURTON | iCem® Service

Created: 2014-12-02 17:51:43, Version: 3.0.121

Edit

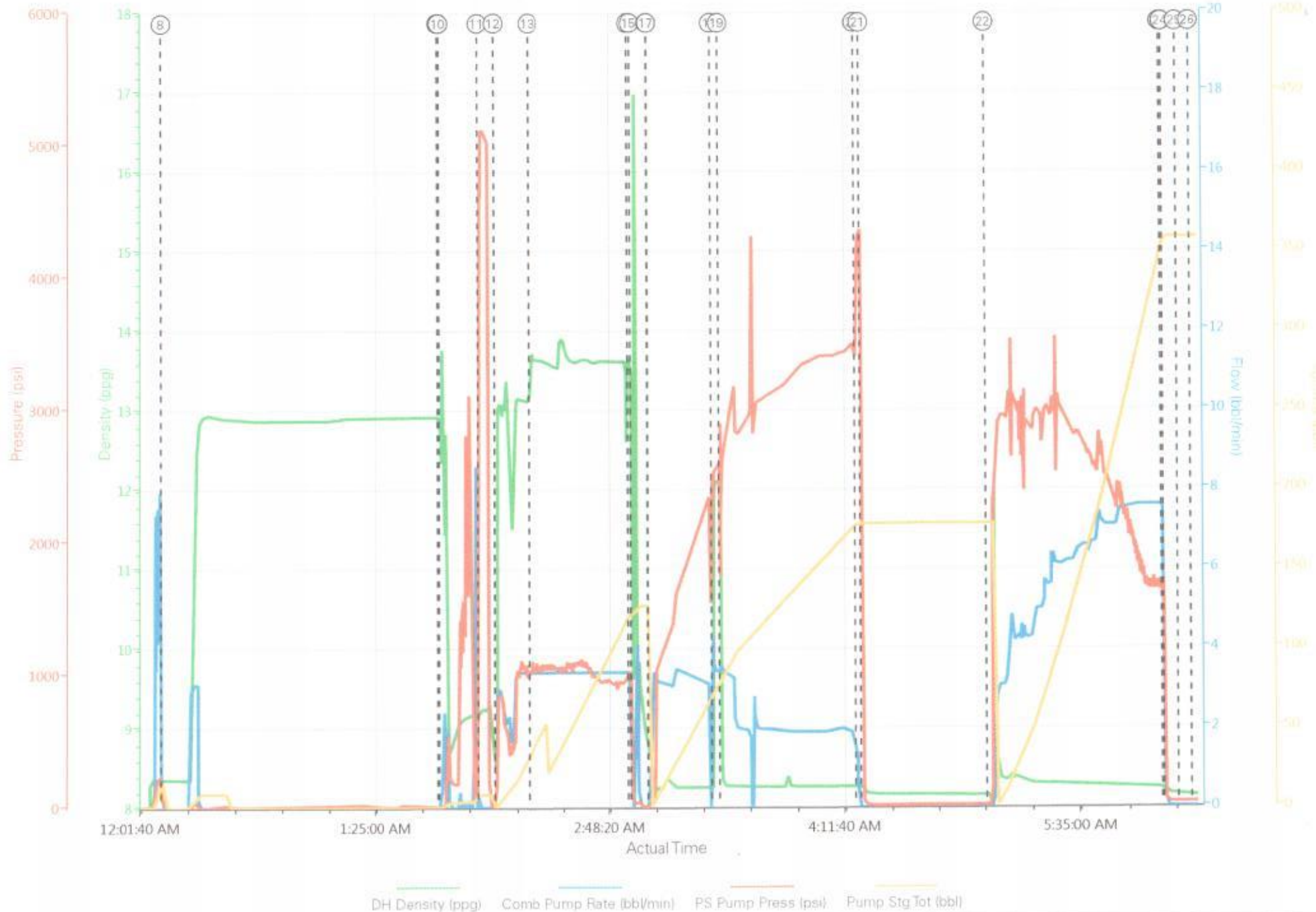
Customer: WHITING OIL & GAS CORP - EBUS
Representative: CRAIG KUKUS

Job Date: 12/2/2014 11:27:46 PM
Sales Order #: 0901873487

Well: 11M-1107
ELITE 4 / OPERATOR: ROGER LAULAINEN

Sundry Number: 59349 API Well Number: 43039500050000

WHITTING OIL & GAS PATTERSON 303 CEMENT PRODUCTION LINER JOB MORONI 11M-1107



HALLIBURTON | iCem® Service

Created: 2014-12-02 17:51:43, Version: 3.0.121 Edit

Customer: WHITING OIL & GAS CORP - EBUS
Representative: CRAIG KUKUS

Job Date: 12/2/2014 11:27:46 PM
Sales Order #: 0901873487

Well: 11M-1107
ELITE 4 / OPERATOR: ROGER LAULAINEN

Sundry Number: 59349 API Well Number: 43039500050000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  12/31/2014
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Status Update

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

Circulate. Run 4-1/2" liner and cement. Run 5-1/2" frac string. ND BOPs. Release rig 12/4/14 @ 0600. Perforate 16,082-16,084' with Coil Tubing and begin DFIT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 07, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	1/2/2015

RECEIVED: Jan. 02, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  1/31/2015
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Status Update

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

Set frac tanks and prepare for frac job. Initiated completion operation on 1/17/15. In January, fracture stimulated 22 stages from 12850' – 16084'overall. Hydraulic fracture operations are on going.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
February 04, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	2/4/2015

RECEIVED: Feb. 04, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ SUBSEQUENT REPORT Date of Work Completion: 2/14/2015	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

First production 2/14/2015

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
February 26, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	2/26/2015

RECEIVED: Feb. 26, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  2/28/2015
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: February Status update

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

Fracture stimulated 6 stages from 12058-12725' overall. Drilled out 7 frac plugs and began flowback. First production on 2/14/15.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 06, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	3/4/2015

RECEIVED: Mar. 04, 2015

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 3/17/2015	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	✓ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Flaring extension

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

Please see attached.

Approved by the
March 31, 2015
Oil, Gas and Mining

Date:

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	3/20/2015

RECEIVED: Mar. 20, 2015

Under the State of Utah rule R649-3-20-3.2, Whiting Oil and Gas Corporation respectfully request approval to continue flaring of the produced gas volume from the Moroni 11M-1107.

Whiting hydraulically stimulated the horizontal lateral in the subject well and subsequently drilled out several frac plugs before encountering excessive working pressure for the coiled tubing unit. As part of the completion operations, we subsequently flowed the well to reduce the wells pressure before drilling the remaining frac plugs. On March 17, 2015, Whiting finished drilling out the frac plugs, released the snubbing unit, and continued the flowback operations.

Whiting currently has a pending Docket 2015-001/Cause 176-05 (flaring exemption) that was originally scheduled for the January hearing. Because the well was not completed before that date, Whiting has requested several continuances to a time where sufficient production history is available to present before the Board. At this time, Whiting feels we will have sufficient production information for the April 22, 2015 hearing and have requested continuance for the said hearing.

Whiting has investigated three sales options. First, Questar Gas Co., a local gas distribution line located approximately one mile away: Questar Gas Co. does not allow direct connection to their local distribution system. Second, Questar Interstate pipeline, approximately 18 miles to a connection. Third, Kern River Interstate, approximately 36 miles to a connection. The two interstate pipelines are presently not interested in connecting the Moroni well as they will require sufficient gas reserves to justify the building a pipeline to this area. Thus, additional development will be required in order to establish gas sales in this area.

Flaring is critical and necessary to acquire additional production data in order to evaluate the reservoir for further area development. The subject well is currently producing approximately 400 to 500 MCFD. In addition, the production data is required to provide the Board with our analysis and recommendation of proper well spacing. As development continues, production information will also be utilized to determine the initial sizing of a gas plant.

Whiting will address the other options that are described in R649-3-20-3.2 at the April 22, 2015 hearing. To date, Whiting has not found an economic alternative to flaring.

In an effort to minimize the effects of flaring, the gas is incinerated in a combustor. It is requested that Whiting be allowed to flare the well through the month of April, 2015 or until the flaring exemption is approve by the board on April 22, 2015.

RECEIVED: Mar. 31, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ SUBSEQUENT REPORT Date of Work Completion: 3/31/2015	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Monthly Status report

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

Drilled out remaining frac plugs and returned to flowback. PBTD @ 16051.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
April 03, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	4/1/2015

RECEIVED: Apr. 01, 2015

Reset Form

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

AMENDED REPORT ☐ (highlight changes)

FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: Patented

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT or CA AGREEMENT NAME: N/A

8. WELL NAME and NUMBER: Moroni 11M-1107

1a. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ DRY ☐ OTHER

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

2. NAME OF OPERATOR: Whiting Oil and Gas Corporation

9. API NUMBER: 4303950005

3. ADDRESS OF OPERATOR: 1700 S Broadway, Ste 23 CITY Denver STATE CO ZIP 80290

PHONE NUMBER: (303) 837-1661

10 FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: 700 FSL 661 FWL

AT TOP PRODUCING INTERVAL REPORTED BELOW: 1058 FSL 672 FWL

AT TOTAL DEPTH: 1124 FSL 692 FEL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 11 15N 3E S 15S

12. COUNTY: Sanpete

13. STATE: UTAH

14. DATE SPUDDED: 8/27/2014

15. DATE T.D. REACHED: 11/30/2014

16. DATE COMPLETED: 2/6/2015 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5555.1' GL, 5577.1' RK

18. TOTAL DEPTH: MD 16,197 TVD 12,997

19. PLUG BACK T.D.: MD 12,948 TVD 11,954

20. IF MULTIPLE COMPLETIONS, HOW MANY? * N/A

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

Combo(AIT, TLD, CNL, GR), Dipmeter, Caliper, Sonic, CBL, Mud logs

23.

WAS WELL CORED?	NO ☐	YES ☑	(Submit analysis)
WAS DST RUN?	NO ☑	YES ☐	(Submit report)
DIRECTIONAL SURVEY?	NO ☐	YES ☑	(Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE		WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS		SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
26	22	H-40	125	22	89	89				22 CIR	N/A
20	16	J-55	65	22	815	815	G	580	234	22 CIR	N/A
14-3/4	10-3/4	NT80	45.5	22	4,794	4,794	G	1,905	758	27 CIR	N/A
9-7/8	7-5/8	HCL-	33.7/39	22	11,284	11,284	G	1,120	423	2000 CBL	N/A
6-1/2	4-1/2	P-110	15.1	10,955	16,187	16,187	G	380	120	10955 CIR	N/A

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
n/a								

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) Tununk	12,058	16,084	11,687	12,973
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS
12,058	16,084	.42	792	Open ☑ Squeezed ☐
				Open ☐ Squeezed ☐
				Open ☐ Squeezed ☐
				Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

WAS WELL HYDRAULICALLY FRACTURED? YES ☑ NO ☐ IF YES -- DATE FRACTURED: 2/6/2015

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
12058-16084 OA	Overall: 106,400 gals acid, 90,380# 100 mesh, 309,680# 40/70 Ottawa, 3,048,690# 20/40 Carbo
	& 160,683 bbls clean volume. See attached for detail by interval.

29. ENCLOSED ATTACHMENTS:

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☑ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☑ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: ACT

(5/2013)

(CONTINUED ON BACK)

RECEIVED: Mar. 24, 2015

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
2/14/2015		3/4/2015		24			81	142	248	Flowing
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
12		500	47.00	1,428	1,753		81	142	248	ACT

INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Flared

33. 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.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.
N/A			None - All Tight

34. FORMATION (Log) MARKERS:

Name	Top (Measured Depth)
Colton	1,193
Flagstaff	2,083
North Horn	2,353
Price River	4,465
Blue Gate	8,860
Ferron	10,367
Tununk	11,295

35. ADDITIONAL REMARKS (Include plugging procedure)

Hard copy Logs are being sent via Mail. Cement reports submitted with monthly status updates throughout drilling operations.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Cara Mezydlo TITLE Engineering Technician III

SIGNATURE DATE 3/23/15

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

MORONI 11M-1107 COMPLETION REPORT
All depths are MD

	Perforation Detail						Stimulation Detail							
Stage	Top	Bottom	Formation	Size (in)	# holes	Status	7.5% HCl (gals)	15% HCl (gals)	28% HCl (gals)	100 Mesh (lbs)	40/70 Ottawa (lbs)	20/40 Carbo ISP (lbs)	Clean Vol (bbls)	NOTES
1	15990	15992	Tununk	0.42	12	Open*	0	1,000	0	0	8,200	150,100	9,579	*Behind flowthru frac plug
	16040	16042	Tununk	0.42	12	Open*								
	16082	16084	Tununk	0.42	12	Open*								
2	15849	15854	Tununk	0.42	12	Open*	0	2,000	0	0	3,000	37,160	4,045	*Behind flowthru frac plug
	15899	15901	Tununk	0.42	12	Open*								
3	15700	15703	Tununk	0.42	24	Open*	0	4,000	0	31,440	3,000	46,540	7,689	*Behind flowthru frac plug
	15748	15751	Tununk	0.42	24	Open*								
4	15573	15577	Tununk	0.42	24	Open*	0	2,000	0	18,500	0	17,650	3,616	*Behind flowthru frac plug
5	15473	15477	Tununk	0.42	24	Open*	0	2,000	0	10,090	18,400	127,510	5,815	*Behind flowthru frac plug
6	15373	15377	Tununk	0.42	24	Open*	0	2,000	0	13,070	9,600	22,340	3,998	*Behind flowthru frac plug
7	15198	15201	Tununk	0.42	18	Open*	0	2,000	0	6,700	0	0	1,842	*Behind flowthru frac plug
8	15075	15077	Tununk	0.42	12	Open*	0	5,000	0	10,580	25,250	233,830	8,606	*Behind flowthru frac plug
	15025	15026	Tununk	0.42	6	Open*								
9	14900	14904	Tununk	0.42	24	Open*	0	3,000	0	0	19,850	168,240	5,889	*Behind flowthru frac plug
10	14785	14787	Tununk	0.42	12	Open*	0	3,000	0	0	20,300	156,900	5,734	*Behind flowthru frac plug
	14787	14789	Tununk	0.52	12	Open*								
11	14675	14677	Tununk	0.42	12	Open*	0	2,500	0	0	2,000	0	2,803	*Behind flowthru frac plug
	14677	14679	Tununk	0.52	12	Open*								
12	14525	14527	Tununk	0.42	12	Open*	0	2,500	0	0	1,230	0	2,753	*Behind flowthru frac plug
	14527	14529	Tununk	0.52	12	Open*								
13	14350	14352	Tununk	0.42	12	Open*	0	2,000	0	0	12,900	290,000	6,324	*Behind flowthru frac plug
	14352	14354	Tununk	0.52	12	Open*								
	14400	14402	Tununk	0.42	12	Open*								
	14402	14404	Tununk	0.52	12	Open*								
14	14200	14201	Tununk	0.42	6	Open*	0	4,500	0	0	10,610	176,000	7,269	*Behind flowthru frac plug
	14201	14202	Tununk	0.52	6	Open*								
	14256	14257	Tununk	0.42	6	Open*								
	14257	14258	Tununk	0.52	6	Open*								
15	14055	14056	Tununk	0.42	6	Open*	0	2,000	0	0	12,670	50,700	4,059	*Behind flowthru frac plug
	14056	14057	Tununk	0.52	6	Open*								
	14100	14101	Tununk	0.42	6	Open*								
	14101	14102	Tununk	0.52	6	Open*								
16	13900	13902	Tununk	0.42	12	Open*	0	4,000	0	0	8,890	29,490	4,418	*Behind flowthru frac plug
	13902	13904	Tununk	0.52	12	Open*								
	13950	13952	Tununk	0.42	12	Open*								
	13952	13954	Tununk	0.52	12	Open*								

RECEIVED: Mar. 24, 2015

MORONI 11M-1107 COMPLETION REPORT
All depths are MD

	Perforation Detail						Stimulation Detail							
Stage	Top	Bottom	Formation	Size (in)	# holes	Status	7.5% HCl (gals)	15% HCl (gals)	28% HCl (gals)	100 Mesh (lbs)	40/70 Ottawa (lbs)	20/40 Carbo ISP (lbs)	Clean Vol (bbls)	NOTES
17	13750	13751	Tununk	0.42	6	Open*	0	2,000	0	0	1,500	0	1,434	*Behind flowthru frac plug
	13751	13752	Tununk	0.52	6	Open*								
	13800	13801	Tununk	0.42	6	Open*								
	13801	13802	Tununk	0.52	6	Open*								
18	13556	13558	Tununk	0.52	12	Open*	0	3,000	0	0	12,500	18,900	5,125	*Behind flowthru frac plug
	13600	13602	Tununk	0.52	12	Open*								
	13650	13652	Tununk	0.52	12	Open*								
19	13350	13352	Tununk	0.52	12	Open*	0	6,000	0	0	15,000	100,000	7,781	*Behind flowthru frac plug
	13400	13402	Tununk	0.52	12	Open*								
	13450	13452	Tununk	0.52	12	Open*								
20	13150	13152	Tununk	0.52	12	Open*	0	3,000	0	0	19,250	34,500	7,039	*Behind flowthru frac plug
	13200	13202	Tununk	0.52	12	Open*								
	13240	13242	Tununk	0.52	12	Open*								
21	13002	13004	Tununk	0.52	12	Open*	0	3,000	0	0	18,450	34,500	4,410	*Behind flowthru frac plug
	13050	13052	Tununk	0.52	12	Open*								
22	12850	12852	Tununk	0.52	12	Open	6,200	0	1,500	0	19,400	320,000	8,266	
	12875	12877	Tununk	0.52	12	Open								
	12900	12902	Tununk	0.52	12	Open								
23	12725	12727	Tununk	0.42	12	Open	6,200	0	0	0	11,500	395,000	7,565	
	12727	12729	Tununk	0.52	12	Open								
24	12600	12602	Tununk	0.42	12	Open	6,200	0	0	0	3,500	0	7,841	
	12602	12604	Tununk	0.52	12	Open								
25	12475	12477	Tununk	0.42	12	Open	6,200	0	0	0	15,000	36,000	4,879	
	12477	12479	Tununk	0.52	12	Open								
26	12350	12352	Tununk	0.42	12	Open	6,200	0	0	0	3,250	0	3,692	
	12352	12354	Tununk	0.52	12	Open								
27X	12296	12298	Tununk	0.42	12	Open	0	0	0	0	0	0	0	This zone was not stimulated
	12298	12300	Tununk	0.52	12	Open								
27	12200	12202	Tununk	0.42	12	Open	6,200	0	0	0	16,000	365,000	8,478	
	12202	12204	Tununk	0.52	12	Open								
28	12058	12060	Tununk	0.42	12	Open	7,200	0	0	0	18,430	238,330	9,734	
	12060	12062	Tununk	0.52	12	Open								
TOTAL	**12058**	**16084**			**816**		**44,400**	**60,500**	**1,500**	**90,380**	**309,680**	**3,048,690**	**160,683**	

RECEIVED: Mar. 24, 2015

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

FORM 7

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well name and number: MORONI 11M-1107

API number: 4303950005

Well Location: QQ SWSW Section 11 Township 15N Range 3E County Sanpete

Well operator: Whiting Oil and Gas Corporation

Address: 1700 Broadway, Suite 2300

city Denver state CO zip 80290 Phone: (303) 837-1661

Drilling contractor: Patterson-UTI Drilling Co LP, LLLP

Address: PO Box 260111

city Dallas state TX zip 75321 Phone: (361) 299-0040

Water encountered (attach additional pages as needed):

DEPTH		VOLUME	QUALITY
FROM	TO	(FLOW RATE OR HEAD)	(FRESH OR SALTY)
2,800	2,840	42	Salty

Formation tops:
(Top to Bottom)

1	Colton	2	Flagstaff	3	North Horn
4	Price River	5	Blue Gate	6	Ferron
7	Tununk	8		9	
10		11		12	

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Cara Mezydlo TITLE Engineering Technician III

SIGNATURE Cara Mezydlo DATE 3/23/15

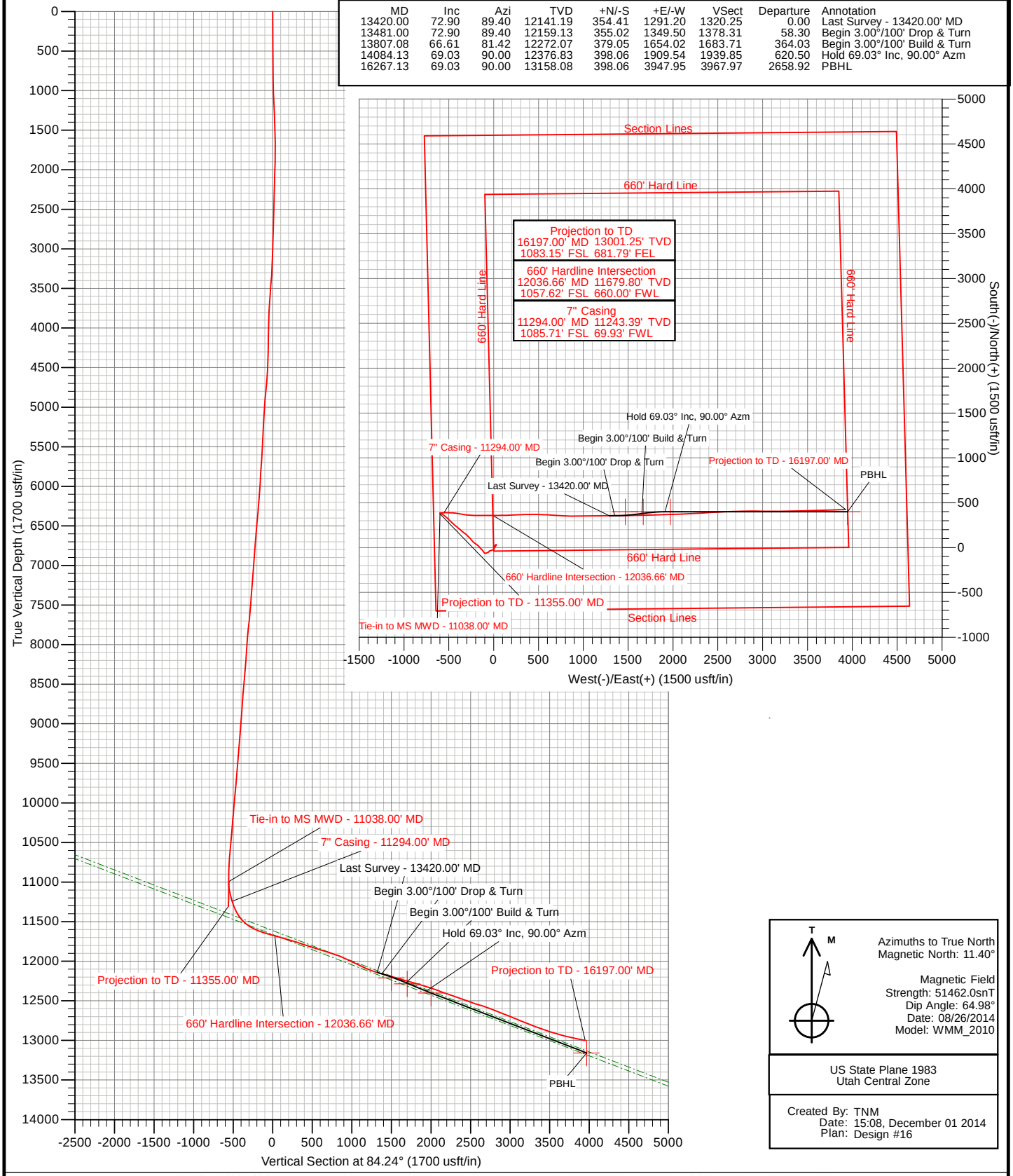
(5/2000)

Company: Whiting Oil & Gas
Site: Moroni 11M
Well: 1107
Project: Sanpete County, Utah (NAD 83)
Rig Name: Patterson 303

MS Energy Services
WWW.MSENERGYSERVICES.COM

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
13420.00	72.90	89.40	12141.19	354.41	1291.20	1320.25	0.00	Last Survey - 13420.00' MD
13481.00	72.90	89.40	12159.13	355.02	1349.50	1378.31	58.30	Begin 3.00°/100' Drop & Turn
13807.08	66.61	81.42	12272.07	379.05	1654.02	1683.71	364.03	Begin 3.00°/100' Build & Turn
14084.13	69.03	90.00	12376.83	398.06	1909.54	1939.85	620.50	Hold 69.03° Inc, 90.00° Azm
16267.13	69.03	90.00	13158.08	398.06	3947.95	3967.97	2658.92	PBHL



Azimuths to True North
Magnetic North: 11.40°

Magnetic Field
Strength: 51462.0snT
Dip Angle: 64.98°
Date: 08/26/2014
Model: WMM_2010

US State Plane 1983
Utah Central Zone

Created By: TNM
Date: 15:08, December 01 2014
Plan: Design #16

The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented.
Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer.
MS Energy is not responsible for the accuracy of this schematic or the information contained herein.

Whiting Oil & Gas

Sanpete County, Utah (NAD 83)
Moroni 11M
1107

Pilot Hole

Survey: MS MWD

Standard Survey Report

01 December, 2014

MS Energy Services
WWW.MSENERGYSERVICES.COM

RECEIVED: Mar. 24, 2015

MS Energy Services
Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Pilot Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Pilot Hole	**Database:**	Conroe Server Database

Project Sanpete County, Utah (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Well 1107

Well Position	**+N/-S**	0.00 usft	**Northing:**	6,994,672.76 usft	**Latitude:**	39° 31' 19.671 N
	+E/-W	0.00 usft	**Easting:**	1,623,007.99 usft	**Longitude:**	111° 33' 42.174 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	5,556.00 usft

Wellbore Pilot Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	08/26/14	11.40	64.98	51,462

Design Pilot Hole

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	84.24

Survey Program **Date** 11/17/14

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
505.00	11,355.00	MS MWD (Pilot Hole)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
505.00	0.90	26.10	504.98	3.56	1.74	2.09	0.18	0.18	0.00
863.00	1.10	26.10	862.92	9.17	4.49	5.39	0.06	0.06	0.00
924.00	1.40	35.40	923.91	10.31	5.18	6.19	0.59	0.49	15.25
1,104.00	2.90	40.30	1,103.78	15.57	9.40	10.92	0.84	0.83	2.72
1,194.00	3.90	44.10	1,193.62	19.51	13.00	14.90	1.14	1.11	4.22
1,290.00	3.70	48.60	1,289.41	23.90	17.60	19.91	0.37	-0.21	4.69
1,385.00	3.30	52.90	1,384.23	27.58	22.08	24.74	0.50	-0.42	4.53
1,480.00	2.40	50.10	1,479.11	30.50	25.79	28.72	0.96	-0.95	-2.95
1,575.00	1.10	49.10	1,574.07	32.37	28.00	31.11	1.37	-1.37	-1.05
1,670.00	1.00	192.40	1,669.06	32.16	28.51	31.60	2.10	-0.11	150.84
1,765.00	1.70	188.60	1,764.03	29.96	28.12	30.99	0.74	0.74	-4.00
1,861.00	2.50	200.60	1,859.97	26.59	27.18	29.71	0.95	0.83	12.50
1,956.00	2.50	209.40	1,954.88	22.85	25.43	27.59	0.40	0.00	9.26
2,051.00	1.80	218.00	2,049.81	19.86	23.49	25.37	0.81	-0.74	9.05

RECEIVED: Mar. 24, 2015

MS Energy Services

Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Pilot Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Pilot Hole	**Database:**	Conroe Server Database

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,147.00	1.80	223.20	2,145.76	17.58	21.53	23.19	0.17	0.00	5.42
2,242.00	2.20	219.20	2,240.71	15.08	19.36	20.77	0.45	0.42	-4.21
2,337.00	3.20	209.80	2,335.60	11.36	16.89	17.94	1.15	1.05	-9.89
2,432.00	1.90	213.50	2,430.50	7.75	14.70	15.41	1.38	-1.37	3.89
2,527.00	2.00	207.10	2,525.45	4.96	13.08	13.51	0.25	0.11	-6.74
2,623.00	2.50	209.00	2,621.37	1.64	11.30	11.41	0.53	0.52	1.98
2,718.00	3.40	205.40	2,716.25	-2.72	9.09	8.77	0.97	0.95	-3.79
2,813.00	3.80	206.30	2,811.06	-8.09	6.48	5.64	0.43	0.42	0.95
2,908.00	3.60	212.10	2,905.86	-13.44	3.50	2.14	0.45	-0.21	6.11
3,003.00	2.30	214.20	3,000.73	-17.54	0.85	-0.92	1.37	-1.37	2.21
3,097.00	2.00	226.90	3,094.67	-20.22	-1.41	-3.43	0.60	-0.32	13.51
3,192.00	2.50	239.90	3,189.60	-22.39	-4.41	-6.64	0.75	0.53	13.68
3,288.00	3.50	242.50	3,285.46	-24.80	-8.82	-11.27	1.05	1.04	2.71
3,383.00	4.70	245.50	3,380.22	-27.75	-14.94	-17.65	1.28	1.26	3.16
3,479.00	4.80	251.30	3,475.89	-30.67	-22.32	-25.29	0.51	0.10	6.04
3,575.00	4.50	256.70	3,571.57	-32.82	-29.79	-32.94	0.55	-0.31	5.63
3,670.00	3.70	260.00	3,666.33	-34.21	-36.44	-39.69	0.88	-0.84	3.47
3,765.00	3.00	253.70	3,761.17	-35.44	-41.84	-45.19	0.83	-0.74	-6.63
3,861.00	2.30	238.70	3,857.06	-37.15	-45.90	-49.40	1.02	-0.73	-15.63
3,956.00	1.70	223.70	3,952.01	-39.16	-48.50	-52.19	0.83	-0.63	-15.79
4,048.00	1.40	199.50	4,043.97	-41.20	-49.82	-53.70	0.77	-0.33	-26.30
4,146.00	1.20	203.20	4,141.95	-43.27	-50.62	-54.71	0.22	-0.20	3.78
4,242.00	1.40	210.60	4,237.92	-45.21	-51.62	-55.89	0.27	0.21	7.71
4,337.00	1.80	228.60	4,332.89	-47.19	-53.33	-57.79	0.67	0.42	18.95
4,431.00	3.00	237.30	4,426.80	-49.50	-56.50	-61.19	1.33	1.28	9.26
4,526.00	3.40	237.70	4,521.66	-52.35	-60.98	-65.92	0.42	0.42	0.42
4,621.00	3.90	247.10	4,616.46	-55.11	-66.33	-71.53	0.82	0.53	9.89
4,716.00	5.10	248.40	4,711.17	-57.92	-73.24	-78.68	1.27	1.26	1.37
4,736.00	5.30	248.60	4,731.09	-58.58	-74.92	-80.42	1.00	1.00	1.00
4,847.00	6.40	247.80	4,841.51	-62.79	-85.42	-91.30	0.99	0.99	-0.72
4,942.00	4.90	273.20	4,936.06	-64.57	-94.38	-100.38	3.03	-1.58	26.74
5,037.00	5.40	305.60	5,030.69	-61.74	-102.07	-107.75	3.06	0.53	34.11
5,132.00	5.40	331.60	5,125.29	-55.20	-107.83	-112.82	2.55	0.00	27.37
5,228.00	5.20	328.30	5,220.87	-47.53	-112.26	-116.47	0.38	-0.21	-3.44
5,323.00	5.60	324.20	5,315.45	-40.11	-117.24	-120.67	0.58	0.42	-4.32
5,418.00	5.40	319.50	5,410.02	-32.95	-122.85	-125.54	0.52	-0.21	-4.95
5,513.00	5.80	316.00	5,504.56	-26.09	-129.09	-131.06	0.55	0.42	-3.68
5,609.00	5.60	315.10	5,600.09	-19.29	-135.76	-137.02	0.23	-0.21	-0.94
5,704.00	5.80	311.10	5,694.62	-12.85	-142.65	-143.22	0.47	0.21	-4.21
5,799.00	6.20	322.10	5,789.10	-5.65	-149.42	-149.23	1.28	0.42	11.58
5,895.00	6.00	321.20	5,884.56	2.36	-155.75	-154.73	0.23	-0.21	-0.94
5,990.00	6.10	318.80	5,979.03	10.02	-162.19	-160.36	0.29	0.11	-2.53
6,085.00	6.70	314.20	6,073.44	17.68	-169.48	-166.85	0.83	0.63	-4.84
6,180.00	6.30	311.50	6,167.83	25.00	-177.36	-173.96	0.53	-0.42	-2.84

RECEIVED: Mar. 24, 2015

MS Energy Services

Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Pilot Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Pilot Hole	**Database:**	Conroe Server Database

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,276.00	6.00	306.40	6,263.27	31.47	-185.35	-181.25	0.65	-0.31	-5.31
6,371.00	7.10	298.60	6,357.66	37.23	-194.50	-189.78	1.49	1.16	-8.21
6,466.00	6.50	305.30	6,451.99	43.14	-204.04	-198.68	1.05	-0.63	7.05
6,562.00	6.00	307.90	6,547.42	49.37	-212.43	-206.41	0.60	-0.52	2.71
6,657.00	6.30	308.00	6,641.87	55.63	-220.46	-213.76	0.32	0.32	0.11
6,752.00	7.80	316.30	6,736.15	63.50	-229.02	-221.49	1.90	1.58	8.74
6,847.00	8.00	316.10	6,830.25	72.92	-238.06	-229.54	0.21	0.21	-0.21
6,943.00	7.20	323.60	6,925.41	82.58	-246.26	-236.73	1.33	-0.83	7.81
7,038.00	7.10	321.10	7,019.67	91.94	-253.48	-242.97	0.34	-0.11	-2.63
7,133.00	7.10	320.20	7,113.94	101.02	-260.93	-249.47	0.12	0.00	-0.95
7,228.00	7.10	315.60	7,208.21	109.72	-268.79	-256.42	0.60	0.00	-4.84
7,323.00	8.10	313.60	7,302.38	118.53	-277.75	-264.45	1.09	1.05	-2.11
7,419.00	6.90	315.30	7,397.56	127.30	-286.70	-272.48	1.27	-1.25	1.77
7,514.00	6.90	314.40	7,491.87	135.35	-294.79	-279.72	0.11	0.00	-0.95
7,609.00	7.50	310.90	7,586.12	143.40	-303.56	-287.63	0.78	0.63	-3.68
7,707.00	7.80	308.30	7,683.25	151.71	-313.61	-296.80	0.47	0.31	-2.65
7,802.00	8.00	300.60	7,777.35	159.07	-324.36	-306.76	1.13	0.21	-8.11
7,897.00	7.50	310.10	7,871.48	166.43	-334.79	-316.40	1.45	-0.53	10.00
7,993.00	5.60	317.50	7,966.85	173.92	-342.75	-323.56	2.16	-1.98	7.71
8,088.00	5.80	310.80	8,061.39	180.47	-349.51	-329.64	0.73	0.21	-7.05
8,183.00	6.30	303.70	8,155.86	186.50	-357.48	-336.96	0.95	0.53	-7.47
8,278.00	6.10	314.80	8,250.30	192.95	-365.40	-344.19	1.28	-0.21	11.68
8,373.00	6.30	311.50	8,344.75	199.96	-372.89	-350.94	0.43	0.21	-3.47
8,469.00	6.80	309.30	8,440.12	207.05	-381.23	-358.53	0.58	0.52	-2.29
8,564.00	7.20	306.00	8,534.41	214.11	-390.40	-366.94	0.60	0.42	-3.47
8,659.00	6.80	305.40	8,628.71	220.87	-399.80	-375.62	0.43	-0.42	-0.63
8,754.00	6.00	317.10	8,723.12	227.76	-407.77	-382.85	1.61	-0.84	12.32
8,849.00	6.20	308.20	8,817.58	234.57	-415.18	-389.54	1.02	0.21	-9.37
8,945.00	6.10	306.00	8,913.03	240.78	-423.38	-397.08	0.27	-0.10	-2.29
9,040.00	6.00	305.80	9,007.50	246.65	-431.49	-404.56	0.11	-0.11	-0.21
9,135.00	6.40	317.10	9,101.95	253.43	-439.12	-411.47	1.35	0.42	11.89
9,231.00	6.80	316.50	9,197.31	261.47	-446.67	-418.18	0.42	0.42	-0.63
9,326.00	6.90	312.50	9,291.63	269.41	-454.75	-425.42	0.51	0.11	-4.21
9,421.00	7.20	310.80	9,385.92	277.15	-463.47	-433.31	0.38	0.32	-1.79
9,516.00	7.00	312.60	9,480.19	284.96	-472.23	-441.25	0.31	-0.21	1.89
9,611.00	7.20	309.30	9,574.46	292.65	-481.10	-449.30	0.48	0.21	-3.47
9,706.00	7.60	316.80	9,668.67	301.00	-490.01	-457.33	1.10	0.42	7.89
9,801.00	8.00	314.10	9,762.79	310.18	-499.06	-465.41	0.57	0.42	-2.84
9,897.00	8.60	315.50	9,857.79	319.95	-508.89	-474.21	0.66	0.63	1.46
9,992.00	7.40	311.30	9,951.86	329.05	-518.46	-482.82	1.40	-1.26	-4.42
10,087.00	7.10	313.70	10,046.10	337.15	-527.30	-490.80	0.45	-0.32	2.53
10,182.00	7.40	309.40	10,140.34	345.09	-536.27	-498.93	0.65	0.32	-4.53
10,277.00	6.20	312.00	10,234.67	352.40	-544.81	-506.70	1.30	-1.26	2.74

RECEIVED: Mar. 24, 2015

MS Energy Services

Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Pilot Hole	**Survey Calculation Method:**	Minimum Curvature
Design:	Pilot Hole	**Database:**	Conroe Server Database

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,373.00	6.30	302.80	10,330.10	358.73	-553.09	-514.30	1.05	0.10	-9.58
10,468.00	6.70	299.40	10,424.49	364.27	-562.30	-522.91	0.58	0.42	-3.58
10,563.00	7.20	300.80	10,518.79	370.04	-572.25	-532.22	0.56	0.53	1.47
10,658.00	6.20	300.10	10,613.14	375.66	-581.80	-541.16	1.06	-1.05	-0.74
10,754.00	4.50	309.70	10,708.73	380.67	-589.18	-548.00	2.00	-1.77	10.00
10,848.00	3.10	299.10	10,802.52	384.26	-594.24	-552.67	1.66	-1.49	-11.28
10,943.00	1.00	297.30	10,897.45	385.89	-597.22	-555.48	2.21	-2.21	-1.89
11,038.00	0.90	190.40	10,992.44	385.53	-598.09	-556.38	1.61	-0.11	-112.53
11,134.00	1.30	190.70	11,088.43	383.72	-598.43	-556.90	0.42	0.42	0.31
11,230.00	1.60	200.70	11,184.40	381.40	-599.11	-557.80	0.41	0.31	10.42
11,272.00	1.90	215.90	11,226.38	380.29	-599.72	-558.53	1.31	0.71	36.19
11,355.00	1.90	215.90	11,309.33	378.06	-601.34	-560.36	0.00	0.00	0.00
Projection to TD - 11355.00' MD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,355.00	11,309.33	378.06	-601.34	Projection to TD - 11355.00' MD

RECEIVED: Mar. 24, 2015

Whiting Oil & Gas

Sanpete County, Utah (NAD 83)
Moroni 11M
1107

Wellbore #1

Survey: MS MWD

Standard Survey Report

01 December, 2014

MS Energy Services
WWW.MSENERGYSERVICES.COM

RECEIVED: Mar. 24, 2015

MS Energy Services
Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys	**Database:**	Conroe Server Database

Project Sanpete County, Utah (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Well 1107

Well Position	**+N/-S**	0.00 usft	**Northing:**	6,994,672.76 usft	**Latitude:**	39° 31' 19.671 N
	+E/-W	0.00 usft	**Easting:**	1,623,007.99 usft	**Longitude:**	111° 33' 42.174 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	5,556.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	08/26/14	11.40	64.98	51,462

Design Surveys

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	11,038.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	84.24

Survey Program **Date** 12/01/14

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
505.00	11,038.00	MS MWD (Pilot Hole)	MWD	MWD - Standard
11,096.00	16,197.00	MS MWD (Wellbore #1)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,038.00	0.90	190.40	10,992.44	385.53	-598.09	-556.38	0.00	0.00	0.00
Tie-in to MS MWD - 11038.00' MD									
11,096.00	4.10	71.90	11,050.40	385.73	-596.20	-554.48	7.93	5.52	-204.31
11,110.00	5.60	105.80	11,064.35	385.70	-595.07	-553.36	22.63	10.71	242.14
11,141.00	8.00	84.00	11,095.13	385.51	-591.47	-549.79	11.24	7.74	-70.32
11,173.00	10.80	98.00	11,126.71	385.33	-586.28	-544.65	11.24	8.75	43.75
11,204.00	14.50	89.00	11,156.95	384.99	-579.52	-537.96	13.49	11.94	-29.03
11,236.00	14.40	84.30	11,187.94	385.46	-571.56	-529.99	3.68	-0.31	-14.69
11,268.00	17.50	82.20	11,218.70	386.51	-562.83	-521.20	9.85	9.69	-6.56
11,294.00	19.09	83.05	11,243.39	387.55	-554.74	-513.04	6.21	6.13	3.28
7" Casing - 11294.00' MD									
11,299.00	19.40	83.20	11,248.11	387.75	-553.10	-511.39	6.21	6.14	2.97
11,346.00	21.20	84.90	11,292.19	389.43	-536.88	-495.09	4.03	3.83	3.62
11,378.00	22.50	90.40	11,321.89	389.90	-524.99	-483.21	7.57	4.06	17.19
11,409.00	24.20	93.60	11,350.35	389.46	-512.72	-471.04	6.84	5.48	10.32

RECEIVED: Mar. 24, 2015

MS Energy Services

Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys	**Database:**	Conroe Server Database

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,441.00	27.70	94.30	11,379.12	388.49	-498.75	-457.25	10.98	10.94	2.19
11,472.00	31.50	91.20	11,406.07	387.78	-483.47	-442.11	13.21	12.26	-10.00
11,504.00	34.90	93.70	11,432.85	387.01	-465.97	-424.77	11.45	10.63	7.81
11,535.00	38.40	96.20	11,457.72	385.40	-447.54	-406.60	12.27	11.29	8.06
11,566.00	43.40	96.70	11,481.14	383.12	-427.38	-386.77	16.16	16.13	1.61
11,598.00	47.60	98.10	11,503.56	380.17	-404.75	-364.55	13.49	13.13	4.38
11,629.00	52.60	100.10	11,523.44	376.39	-381.28	-341.58	16.87	16.13	6.45
11,661.00	55.30	99.90	11,542.27	371.90	-355.80	-316.68	8.45	8.44	-0.63
11,692.00	57.80	97.80	11,559.36	367.93	-330.25	-291.65	9.85	8.06	-6.77
11,723.00	59.70	96.50	11,575.44	364.63	-303.95	-265.82	7.10	6.13	-4.19
11,755.00	63.30	95.60	11,590.71	361.67	-275.99	-238.30	11.52	11.25	-2.81
11,786.00	66.10	94.00	11,603.96	359.33	-248.07	-210.75	10.17	9.03	-5.16
11,817.00	69.60	92.90	11,615.64	357.61	-219.41	-182.41	11.76	11.29	-3.55
11,849.00	73.00	89.60	11,625.91	356.96	-189.12	-152.34	14.43	10.63	-10.31
11,881.00	73.20	89.30	11,635.21	357.25	-158.50	-121.85	1.09	0.63	-0.94
11,913.00	73.10	89.30	11,644.48	357.63	-127.88	-91.34	0.31	-0.31	0.00
11,944.00	73.60	90.10	11,653.37	357.78	-98.18	-61.78	2.95	1.61	2.58
11,975.00	73.70	90.00	11,662.09	357.76	-68.43	-32.18	0.45	0.32	-0.32
12,007.00	73.30	90.10	11,671.18	357.73	-37.75	-1.66	1.29	-1.25	0.31
12,036.66	72.92	90.00	11,679.80	357.70	-9.37	26.58	1.33	-1.29	-0.32
660' Hardline Intersection - 12036.66' MD									
12,038.00	72.90	90.00	11,680.19	357.70	-8.09	27.85	1.33	-1.29	-0.32
12,070.00	73.90	89.10	11,689.33	357.94	22.58	58.39	4.13	3.13	-2.81
12,101.00	75.00	88.50	11,697.65	358.57	52.43	88.16	4.01	3.55	-1.94
12,133.00	75.20	88.70	11,705.87	359.33	83.35	118.99	0.87	0.63	0.63
12,165.00	75.40	88.90	11,713.99	359.97	114.29	149.84	0.87	0.63	0.63
12,196.00	75.30	89.40	11,721.83	360.42	144.28	179.73	1.59	-0.32	1.61
12,227.00	74.70	88.70	11,729.86	360.91	174.22	209.56	2.92	-1.94	-2.26
12,259.00	72.60	88.00	11,738.87	361.80	204.91	240.19	6.89	-6.56	-2.19
12,291.00	71.60	87.20	11,748.70	363.07	235.34	270.59	3.93	-3.13	-2.50
12,322.00	71.20	87.20	11,758.59	364.51	264.68	299.93	1.29	-1.29	0.00
12,353.00	71.70	87.00	11,768.45	365.99	294.03	329.28	1.72	1.61	-0.65
12,385.00	71.70	87.50	11,778.50	367.45	324.38	359.62	1.48	0.00	1.56
12,415.00	71.90	87.70	11,787.87	368.65	352.86	388.07	0.92	0.67	0.67
12,477.00	72.00	89.90	11,807.08	369.88	411.79	446.83	3.38	0.16	3.55
12,571.00	73.30	93.30	11,835.12	367.37	501.46	535.79	3.72	1.38	3.62
12,666.00	72.10	91.20	11,863.37	363.80	592.08	625.60	2.46	-1.26	-2.21
12,760.00	72.40	93.60	11,892.03	360.05	681.52	714.21	2.45	0.32	2.55
12,854.00	73.10	94.70	11,919.91	353.55	771.05	802.64	1.34	0.74	1.17
12,948.00	65.10	89.40	11,953.44	350.31	858.70	889.52	10.01	-8.51	-5.64
13,043.00	64.50	89.30	11,993.88	351.28	944.65	975.14	0.64	-0.63	-0.11
13,074.00	64.50	89.40	12,007.23	351.60	972.63	1,003.01	0.29	0.00	0.32
13,105.00	65.00	89.30	12,020.45	351.92	1,000.67	1,030.93	1.64	1.61	-0.32

RECEIVED: Mar. 24, 2015

MS Energy Services

Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys	**Database:**	Conroe Server Database

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,137.00	65.00	89.10	12,033.98	352.32	1,029.67	1,059.83	0.57	0.00	-0.63
13,168.00	64.80	89.20	12,047.13	352.74	1,057.73	1,087.80	0.71	-0.65	0.32
13,200.00	64.70	89.60	12,060.78	353.04	1,086.68	1,116.62	1.17	-0.31	1.25
13,231.00	65.10	89.30	12,073.93	353.31	1,114.75	1,144.58	1.56	1.29	-0.97
13,263.00	66.50	89.30	12,087.05	353.67	1,143.93	1,173.65	4.38	4.38	0.00
13,294.00	67.40	89.60	12,099.18	353.94	1,172.46	1,202.06	3.04	2.90	0.97
13,326.00	69.30	89.60	12,110.99	354.15	1,202.20	1,231.67	5.94	5.94	0.00
13,357.00	70.80	90.20	12,121.57	354.20	1,231.33	1,260.67	5.17	4.84	1.94
13,420.00	72.90	89.40	12,141.19	354.41	1,291.20	1,320.25	3.54	3.33	-1.27
13,451.00	73.60	89.70	12,150.12	354.64	1,320.88	1,349.80	2.44	2.26	0.97
13,482.00	74.10	89.60	12,158.75	354.82	1,350.66	1,379.45	1.64	1.61	-0.32
13,514.00	74.10	89.70	12,167.51	355.01	1,381.43	1,410.09	0.30	0.00	0.31
13,545.00	74.30	89.60	12,175.95	355.19	1,411.26	1,439.78	0.72	0.65	-0.32
13,577.00	74.40	89.80	12,184.59	355.36	1,442.07	1,470.45	0.68	0.31	0.63
13,608.00	74.60	89.40	12,192.87	355.56	1,471.94	1,500.20	1.40	0.65	-1.29
13,639.00	73.80	88.70	12,201.31	356.06	1,501.77	1,529.92	3.37	-2.58	-2.26
13,671.00	73.30	88.50	12,210.37	356.81	1,532.45	1,560.52	1.67	-1.56	-0.63
13,703.00	73.60	88.90	12,219.49	357.50	1,563.11	1,591.10	1.52	0.94	1.25
13,797.00	74.20	88.00	12,245.56	359.95	1,653.39	1,681.17	1.12	0.64	-0.96
13,890.00	74.40	88.90	12,270.72	362.37	1,742.89	1,770.46	0.96	0.22	0.97
13,921.00	74.60	88.90	12,279.01	362.94	1,772.76	1,800.23	0.65	0.65	0.00
13,953.00	75.10	88.90	12,287.37	363.54	1,803.64	1,831.02	1.56	1.56	0.00
13,984.00	74.10	88.70	12,295.60	364.16	1,833.52	1,860.81	3.29	-3.23	-0.65
14,016.00	73.40	88.20	12,304.56	364.99	1,864.23	1,891.45	2.65	-2.19	-1.56
14,047.00	72.20	87.80	12,313.72	366.03	1,893.82	1,921.00	4.06	-3.87	-1.29
14,079.00	71.50	88.00	12,323.69	367.14	1,924.21	1,951.34	2.27	-2.19	0.63
14,110.00	72.30	87.80	12,333.32	368.22	1,953.66	1,980.75	2.65	2.58	-0.65
14,141.00	71.80	87.30	12,342.88	369.48	1,983.12	2,010.19	2.23	-1.61	-1.61
14,173.00	71.50	88.00	12,352.95	370.73	2,013.47	2,040.51	2.28	-0.94	2.19
14,204.00	69.90	88.20	12,363.20	371.70	2,042.71	2,069.70	5.20	-5.16	0.65
14,236.00	69.90	88.00	12,374.19	372.69	2,072.74	2,099.68	0.59	0.00	-0.63
14,267.00	70.40	87.80	12,384.72	373.76	2,101.88	2,128.78	1.72	1.61	-0.65
14,299.00	70.90	87.50	12,395.32	375.00	2,132.05	2,158.92	1.80	1.56	-0.94
14,330.00	70.70	87.70	12,405.52	376.23	2,161.30	2,188.14	0.89	-0.65	0.65
14,361.00	70.70	87.50	12,415.76	377.45	2,190.53	2,217.35	0.61	0.00	-0.65
14,393.00	71.70	88.00	12,426.08	378.64	2,220.80	2,247.59	3.46	3.13	1.56
14,424.00	71.30	86.90	12,435.91	379.95	2,250.17	2,276.94	3.60	-1.29	-3.55
14,456.00	69.40	85.80	12,446.67	381.86	2,280.24	2,307.05	6.76	-5.94	-3.44
14,487.00	69.30	86.10	12,457.61	383.91	2,309.18	2,336.05	0.96	-0.32	0.97
14,518.00	69.50	85.70	12,468.51	385.99	2,338.12	2,365.05	1.37	0.65	-1.29
14,550.00	70.70	87.00	12,479.40	387.90	2,368.15	2,395.12	5.35	3.75	4.06
14,581.00	71.30	86.90	12,489.50	389.46	2,397.42	2,424.40	1.96	1.94	-0.32
14,613.00	70.90	86.90	12,499.86	391.10	2,427.65	2,454.64	1.25	-1.25	0.00
14,644.00	70.20	86.70	12,510.19	392.73	2,456.83	2,483.84	2.34	-2.26	-0.65

RECEIVED: Mar. 24, 2015

MS Energy Services

Survey Report

Company:	Whiting Oil & Gas	**Local Co-ordinate Reference:**	Well 1107
Project:	Sanpete County, Utah (NAD 83)	**TVD Reference:**	WELL @ 5580.00usft (Patterson 303)
Site:	Moroni 11M	**MD Reference:**	WELL @ 5580.00usft (Patterson 303)
Well:	1107	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys	**Database:**	Conroe Server Database

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,676.00	70.00	86.90	12,521.08	394.41	2,486.88	2,513.90	0.86	-0.63	0.63
14,707.00	71.00	87.50	12,531.43	395.84	2,516.06	2,543.08	3.71	3.23	1.94
14,739.00	72.30	87.20	12,541.50	397.24	2,546.40	2,573.41	4.16	4.06	-0.94
14,770.00	73.00	87.20	12,550.74	398.69	2,575.96	2,602.96	2.26	2.26	0.00
14,802.00	73.00	86.90	12,560.10	400.26	2,606.52	2,633.53	0.90	0.00	-0.94
14,833.00	72.80	87.20	12,569.22	401.79	2,636.11	2,663.12	1.13	-0.65	0.97
14,865.00	72.30	87.90	12,578.81	403.09	2,666.61	2,693.60	2.61	-1.56	2.19
14,896.00	70.00	87.80	12,588.83	404.19	2,695.92	2,722.87	7.43	-7.42	-0.32
14,927.00	69.20	89.30	12,599.63	404.93	2,724.97	2,751.85	5.22	-2.58	4.84
14,959.00	69.70	89.30	12,610.87	405.29	2,754.93	2,781.69	1.56	1.56	0.00
14,990.00	68.90	89.90	12,621.82	405.50	2,783.92	2,810.57	3.15	-2.58	1.94
15,022.00	67.70	90.00	12,633.65	405.52	2,813.66	2,840.15	3.76	-3.75	0.31
15,053.00	67.50	89.90	12,645.47	405.55	2,842.32	2,868.67	0.71	-0.65	-0.32
15,084.00	67.20	90.20	12,657.41	405.52	2,870.93	2,897.13	1.32	-0.97	0.97
15,116.00	67.40	89.40	12,669.76	405.63	2,900.45	2,926.51	2.39	0.63	-2.50
15,147.00	68.60	90.20	12,681.37	405.73	2,929.19	2,955.12	4.55	3.87	2.58
15,179.00	69.10	90.10	12,692.91	405.65	2,959.03	2,984.80	1.59	1.56	-0.31
15,210.00	69.10	90.20	12,703.97	405.57	2,987.99	3,013.61	0.30	0.00	0.32
15,242.00	69.30	90.20	12,715.34	405.47	3,017.91	3,043.36	0.63	0.63	0.00
15,273.00	69.50	90.00	12,726.24	405.42	3,046.93	3,072.23	0.88	0.65	-0.65
15,304.00	68.90	89.90	12,737.25	405.44	3,075.90	3,101.07	1.96	-1.94	-0.32
15,336.00	67.10	90.10	12,749.24	405.44	3,105.57	3,130.58	5.65	-5.63	0.63
15,367.00	66.80	90.20	12,761.38	405.37	3,134.10	3,158.96	1.01	-0.97	0.32
15,399.00	66.50	90.20	12,774.06	405.26	3,163.48	3,188.18	0.94	-0.94	0.00
15,493.00	69.20	89.60	12,809.50	405.42	3,250.53	3,274.81	2.93	2.87	-0.64
15,588.00	70.00	88.60	12,842.61	406.82	3,339.56	3,363.53	1.30	0.84	-1.05
15,682.00	71.00	87.90	12,873.99	409.53	3,428.13	3,451.92	1.27	1.06	-0.74
15,777.00	74.30	88.60	12,902.32	412.29	3,518.75	3,542.36	3.54	3.47	0.74
15,871.00	75.30	88.90	12,926.96	414.27	3,609.44	3,632.79	1.11	1.06	0.32
15,965.00	75.90	88.40	12,950.34	416.42	3,700.46	3,723.57	0.82	0.64	-0.53
16,059.00	77.10	88.20	12,972.28	419.13	3,791.82	3,814.74	1.29	1.28	-0.21
16,119.00	78.10	88.00	12,985.17	421.07	3,850.38	3,873.20	1.70	1.67	-0.33
16,197.00	78.10	88.00	13,001.25	423.74	3,926.66	3,949.36	0.00	0.00	0.00
Projection to TD - 16197.00' MD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,038.00	10,992.44	385.53	-598.09	Tie-in to MS MWD - 11038.00' MD
11,294.00	11,243.39	387.55	-554.74	7" Casing - 11294.00' MD
12,036.66	11,679.80	357.70	-9.37	660' Hardline Intersection - 12036.66' MD
16,197.00	13,001.25	423.74	3,926.66	Projection to TD - 16197.00' MD

RECEIVED: Mar. 24, 2015

Weatherford LABORATORIES

SUMMARY OF ROUTINE CORE ANALYSES RESULTS

Vacuum Oven Dried at 180° F Net Confining Stress: 1,217 psi

Whiting Oil and Gas Corporation
Moroni 11M-1107 Well
Wildcat Field

Sanpete County, Utah
File No.: CO-73733
Date: 12/24/2014

Core Number	Sample Number	Sample Depth, feet	Permeability, millidarcys		Porosity, percent		Grain Density, gm/cc	Fluid Saturations, percent		
			to Air	Klinkenberg	Ambient	NCS		Water	Oil	Total
3	3-9A	11,370.50	0.0081	0.0035	2.6	2.6	2.67			**
3	3-9B	11,370.50	0.0067	0.0028	2.2	2.1	2.66			
3	3-20A	11,381.75	0.020	0.010	2.5	2.5	2.66			**
3	3-20B	11,381.75	0.0016	0.0005	2.5	2.5	2.66			
3	3-21A	11,382.50	0.070	0.045	3.6	3.5	2.67			**
3	3-21B	11,382.50	0.045	0.027	2.7	2.6	2.65			
4	4-6A(f)	11,391.70	0.791	0.573	2.8	2.8	2.66			**
4	4-6B	11,391.70	0.974	0.714	3.4	3.3	2.68			
6	6-4A	11,472.10	0.032	0.018	2.4	2.3	2.67			**
6	6-4B	11,472.10	0.079	0.051	2.6	2.6	2.67			
6	6-6A	11,474.50	0.025	0.014	2.1	2.1	2.66			**
6	6-6B	11,474.50	0.022	0.012	2.1	2.0	2.66			
6	6-28A	11,496.40	0.015	0.0074	1.6	1.6	2.67			**
6	6-28B	11,496.40	0.017	0.0084	1.2	1.2	2.66			
7	7-60A	11,558.20	0.0005	0.0001	1.6	1.6	2.69			**
7	7-60B	11,558.20	0.0005	0.0001	2.1	2.1	2.70			
		Average values:	0.132	0.093	2.4	2.3	2.67			

** Indicates pore volume / water out was insuffcient to report saturations
(f) Indicates the sample has a visible fracture or lamination that may affect permeability measurement
"A" samples underwent Dean Stark extraction
"B" Samples did not undego Dean Stark extraction

RECEIVED: Mar. 24, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  5/22/2015
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Install Tubing

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

5/12/15 Ran production tubing. Set packer @ 11,014.7' with end of tubing @ 11,044'62'. See attached well bore diagram.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
June 04, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	6/4/2015

RECEIVED: Jun. 04, 2015

Lease Review All - CR

Well Name: MORONI 11M-1107

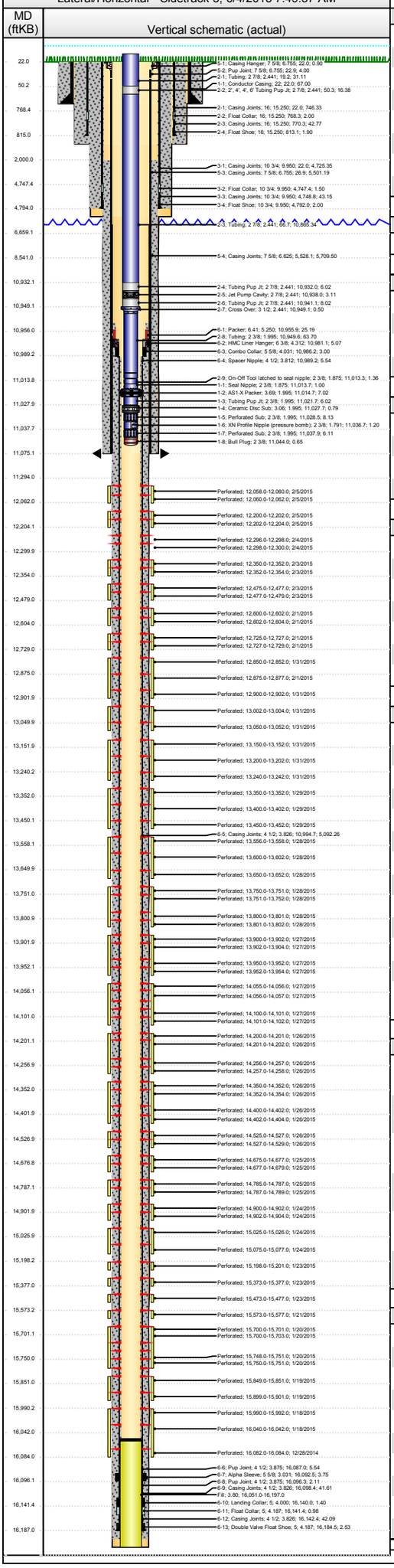
API Number	WPC ID	Well Permit Number	Field Name	County	State
430395000500	1UT030800		Wildcat	Sanpete	UT

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	5,577.10	5,555.10			16,197.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
8/27/2014	2/6/2015	Central Rockies	Jared Huckabee	700.0	FSL	661.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	SW	SW			11			15	N	3	E	S

Lateral/Horizontal - Sidetrack 3, 6/4/2015 7:49:37 AM



Wellbore Sections

Section Des	Wellbore Name	Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
Conductor	Original Hole	8/25/2014	26	22.0	89.0
Surface	Original Hole	8/27/2014	20	89.0	816.0
Intermediate	Original Hole	8/31/2014	14 3/4	816.0	4,800.0
Intermediate 1	Original Hole	9/16/2014	9 7/8	4,800.0	11,294.0
Pilot Hole	Original Hole	10/18/2014	6 1/2	11,294.0	11,765.0
Sidetrack	Sidetrack	11/3/2014	6 1/2	11,258.0	11,355.0
Sidetrack 2	Sidetrack 2	11/7/2014	6 1/2	11,171.0	11,185.0
Sidetrack 3	Sidetrack 3	11/11/2014	6 1/8	11,075.0	16,197.0

Conductor Pipe, 89.0ftKB

OD (in)	ID (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
22		125.00	H-40	22.0	89.0	67.00	Conductor Casing

Surface Csg, 815.0ftKB

OD (in)	ID (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
16	15.250	65.00	J-55	22.0	768.3	746.33	Casing Joints
16	15.250	65.00	J-55	768.3	770.3	2.00	Float Collar
16	15.250	65.00	J-55	770.3	813.1	42.77	Casing Joints
16	15.250	65.00	J-55	813.1	815.0	1.90	Float Shoe

Intermediate Csg, 4,794.0ftKB

OD (in)	ID (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
10 3/4	9.950	45.50	NT80-HE	22.0	4,747.4	4,725.35	Casing Joints
10 3/4	9.950	45.50	NT80-H	4,747.4	4,748.9	1.50	Float Collar
10 3/4	9.950	45.50	NT80-HE	4,748.9	4,792.0	43.15	Casing Joints
10 3/4	9.950	45.50	NT80-H	4,792.0	4,794.0	2.00	Float Shoe

Intermediate Csg, 11,284.0ftKB

OD (in)	ID (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7 5/8	6.755	33.70	HCL-80 LC	22.0	22.9	0.90	Casing Hanger
7 5/8	6.755	33.70	HCL-80 LC	22.9	26.9	4.00	Pup Joint
7 5/8	6.755	33.70	HCL-80 LC	26.9	5,528.1	5,501.19	Casing Joints
7 5/8	6.625	39.00	HCL-80 LC	5,528.1	11,237.6	5,709.50	Casing Joints
7 5/8	6.625	39.00	HCL-80 LC	11,237.6	11,238.9	1.35	Float Collar
7 5/8	6.625	39.00	HCL-80 LC	11,238.9	11,282.4	43.46	Casing Joints
7 5/8	6.625	39.00	HCL-80 LC	11,282.4	11,284.0	1.60	Guide Shoe

Liner, 16,187.0ftKB

OD (in)	ID (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
6.406	5.250	15.10	P-110	10,955.9	10,981.1	25.19	Packer
6 3/8	4.312	15.10	P-110	10,981.1	10,986.2	5.07	HMC Liner Hanger
5 5/8	4.031	15.10	P-110	10,986.2	10,989.2	3.00	Combo Collar
4 1/2	3.812	15.10	P-110	10,989.2	10,994.7	5.54	Spacer Nipple
4 1/2	3.826	15.10	P-110	10,994.7	16,087.0	5,092.26	Casing Joints
4 1/2	3.875	15.10	P-110	16,087.0	16,092.5	5.54	Pup Joint
5 5/8	3.031	15.10	P-110	16,092.5	16,096.3	3.75	Alpha Sleeve
4 1/2	3.875	15.10	P-110	16,096.3	16,098.4	2.11	Pup Joint
4 1/2	3.826	15.10	P-110	16,098.4	16,140.0	41.61	Casing Joints
5	4.000	15.10	P-110	16,140.0	16,141.4	1.40	Landing Collar
5	4.187	15.10	P-110	16,141.4	16,142.4	0.98	Float Collar
4 1/2	3.826	15.10	P-110	16,142.4	16,184.5	42.09	Casing Joints
5	4.187	15.50	P-110	16,184.5	16,187.0	2.53	Double Valve Float Shoe

Cement Stages

Des	Pump Start Date	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Conductor Cement	8/23/2014		22.0	89.0	Returns to Surface
Surface Casing Cement	8/29/2014		22.0	816.0	Returns to Surface
Intermediate Casing Cement	9/14/2014		22.0	4,794.0	Returns to Surface
Intermediate Casing Cement 2	10/17/2014		2,000.0	11,284.0	CBL
Cement Plug	10/30/2014		11,270.0	11,737.0	Volume Calculations
Liner Cement	12/3/2014		10,955.0	16,188.0	Returns to Surface

Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated	2/5/2015	12,058.0	12,060.0	Tununk, Sidetrack 3
Perforated	2/5/2015	12,060.0	12,062.0	Tununk, Sidetrack 3
Perforated	2/5/2015	12,200.0	12,202.0	Tununk, Sidetrack 3
Perforated	2/5/2015	12,202.0	12,204.0	Tununk, Sidetrack 3
Perforated	2/4/2015	12,296.0	12,298.0	Tununk, Sidetrack 3
Perforated	2/4/2015	12,298.0	12,300.0	Tununk, Sidetrack 3
Perforated	2/3/2015	12,350.0	12,352.0	Tununk, Sidetrack 3
Perforated	2/3/2015	12,352.0	12,354.0	Tununk, Sidetrack 3
Perforated	2/3/2015	12,475.0	12,477.0	Tununk, Sidetrack 3
Perforated	2/3/2015	12,477.0	12,479.0	Tununk, Sidetrack 3

Lease Review All - CR

Well Name: MORONI 11M-1107

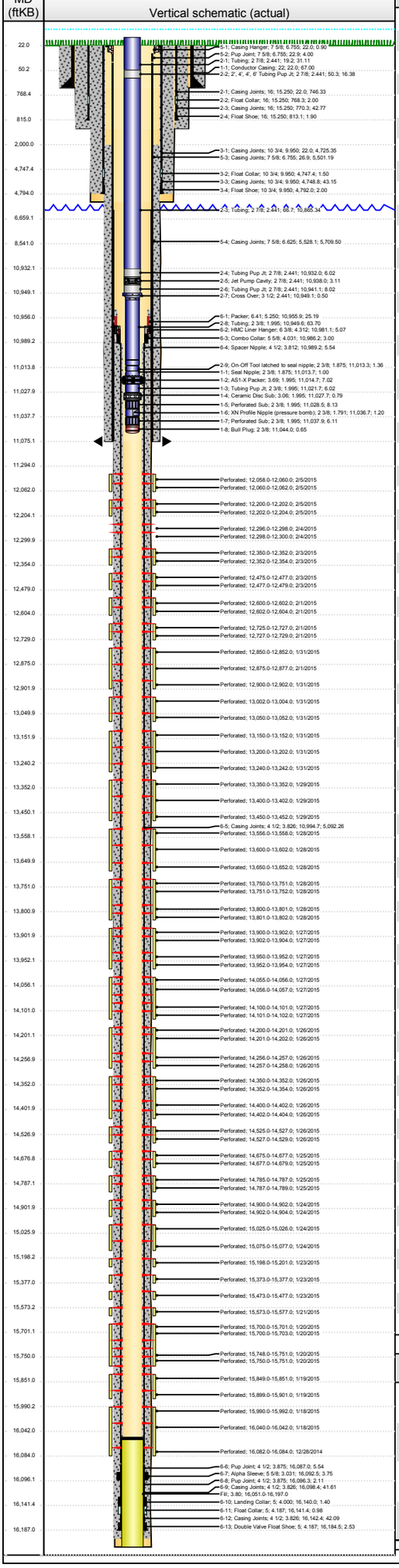
API Number	WPC ID	Well Permit Number	Field Name	County	State
430395000500	1UT030800		Wildcat	Sanpete	UT

Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	5,577.10	5,555.10			16,197.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
8/27/2014	2/6/2015	Central Rockies	Jared Huckabee	700.0	FSL	661.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	SW	SW			11			15	N	3	E	S

Lateral/Horizontal - Sidetrack 3, 6/4/2015 7:49:37 AM



Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone
Perforated	2/1/2015	12,600.0	12,602.0	Tununk, Sidetrack 3
Perforated	2/1/2015	12,602.0	12,604.0	Tununk, Sidetrack 3
Perforated	2/1/2015	12,725.0	12,727.0	Tununk, Sidetrack 3
Perforated	2/1/2015	12,727.0	12,729.0	Tununk, Sidetrack 3
Perforated	1/31/2015	12,850.0	12,852.0	Tununk, Sidetrack 3
Perforated	2/1/2015	12,875.0	12,877.0	Tununk, Sidetrack 3
Perforated	1/31/2015	12,900.0	12,902.0	Tununk, Sidetrack 3
Perforated	1/31/2015	13,002.0	13,004.0	Tununk, Sidetrack 3
Perforated	1/31/2015	13,050.0	13,052.0	Tununk, Sidetrack 3
Perforated	1/31/2015	13,150.0	13,152.0	Tununk, Sidetrack 3
Perforated	1/31/2015	13,200.0	13,202.0	Tununk, Sidetrack 3
Perforated	1/31/2015	13,240.0	13,242.0	Tununk, Sidetrack 3
Perforated	1/29/2015	13,350.0	13,352.0	Tununk, Sidetrack 3
Perforated	1/29/2015	13,400.0	13,402.0	Tununk, Sidetrack 3
Perforated	1/29/2015	13,450.0	13,452.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,556.0	13,558.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,600.0	13,602.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,650.0	13,652.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,750.0	13,751.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,751.0	13,752.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,800.0	13,801.0	Tununk, Sidetrack 3
Perforated	1/28/2015	13,801.0	13,802.0	Tununk, Sidetrack 3
Perforated	1/27/2015	13,900.0	13,902.0	Tununk, Sidetrack 3
Perforated	1/27/2015	13,902.0	13,904.0	Tununk, Sidetrack 3
Perforated	1/27/2015	13,950.0	13,952.0	Tununk, Sidetrack 3
Perforated	1/27/2015	13,952.0	13,954.0	Tununk, Sidetrack 3
Perforated	1/27/2015	14,055.0	14,056.0	Tununk, Sidetrack 3
Perforated	1/27/2015	14,056.0	14,057.0	Tununk, Sidetrack 3
Perforated	1/27/2015	14,100.0	14,101.0	Tununk, Sidetrack 3
Perforated	1/27/2015	14,101.0	14,102.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,200.0	14,201.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,201.0	14,202.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,256.0	14,257.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,257.0	14,258.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,350.0	14,352.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,352.0	14,354.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,400.0	14,402.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,402.0	14,404.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,525.0	14,527.0	Tununk, Sidetrack 3
Perforated	1/26/2015	14,527.0	14,529.0	Tununk, Sidetrack 3
Perforated	1/25/2015	14,675.0	14,677.0	Tununk, Sidetrack 3
Perforated	1/25/2015	14,677.0	14,679.0	Tununk, Sidetrack 3
Perforated	1/25/2015	14,785.0	14,787.0	Tununk, Sidetrack 3
Perforated	1/25/2015	14,787.0	14,789.0	Tununk, Sidetrack 3
Perforated	1/24/2015	14,900.0	14,902.0	Tununk, Sidetrack 3
Perforated	1/24/2015	14,902.0	14,904.0	Tununk, Sidetrack 3
Perforated	1/24/2015	15,025.0	15,026.0	Tununk, Sidetrack 3
Perforated	1/24/2015	15,075.0	15,077.0	Tununk, Sidetrack 3
Perforated	1/23/2015	15,198.0	15,201.0	Tununk, Sidetrack 3
Perforated	1/23/2015	15,373.0	15,377.0	Tununk, Sidetrack 3
Perforated	1/23/2015	15,473.0	15,477.0	Tununk, Sidetrack 3
Perforated	1/21/2015	15,573.0	15,577.0	Tununk, Sidetrack 3
Perforated	1/20/2015	15,700.0	15,701.0	Tununk, Sidetrack 3
Perforated	1/20/2015	15,700.0	15,703.0	Tununk, Sidetrack 3
Perforated	1/20/2015	15,748.0	15,751.0	Tununk, Sidetrack 3
Perforated	1/20/2015	15,750.0	15,751.0	Tununk, Sidetrack 3
Perforated	1/19/2015	15,849.0	15,851.0	Tununk, Sidetrack 3
Perforated	1/19/2015	15,899.0	15,901.0	Tununk, Sidetrack 3
Perforated	1/18/2015	15,990.0	15,992.0	Tununk, Sidetrack 3
Perforated	1/18/2015	16,040.0	16,042.0	Tununk, Sidetrack 3
Perforated	12/28/2014	16,082.0	16,084.0	Tununk, Sidetrack 3

Stim/Treat Stages

Stage Type	Start Date	Top (ftKB)	Btm (ftKB)	Stim/Treat Fluid	Vol Clean Pump (bbl)
P&P	2/6/2015	12,058.0	12,062.0	HYBOR G 35; LINEAR 35; 7.5 HCL, <fluidtyp>	9733.88
P&P	2/5/2015	12,200.0	12,204.0	HYBOR G 35; LINEAR 35; 7.5 HCL, <fluidtyp>	8477.88
P&P	2/3/2015	12,350.0	12,354.0	HYBOR G 35; LINEAR 35; 7.5 HCL, <fluidtyp>	3692.43
P&P	2/3/2015	12,475.0	12,479.0	HYBOR G 35; LINEAR 35; 7.5 HCL, <fluidtyp>	4878.91

RECEIVED: Jun. 04, 2015

Lease Review All - CR

Well Name: MORONI 11M-1107

API Number	WPC ID	Well Permit Number	Field Name	County	State
430395000500	1UT030800		Wildcat	Sanpete	UT

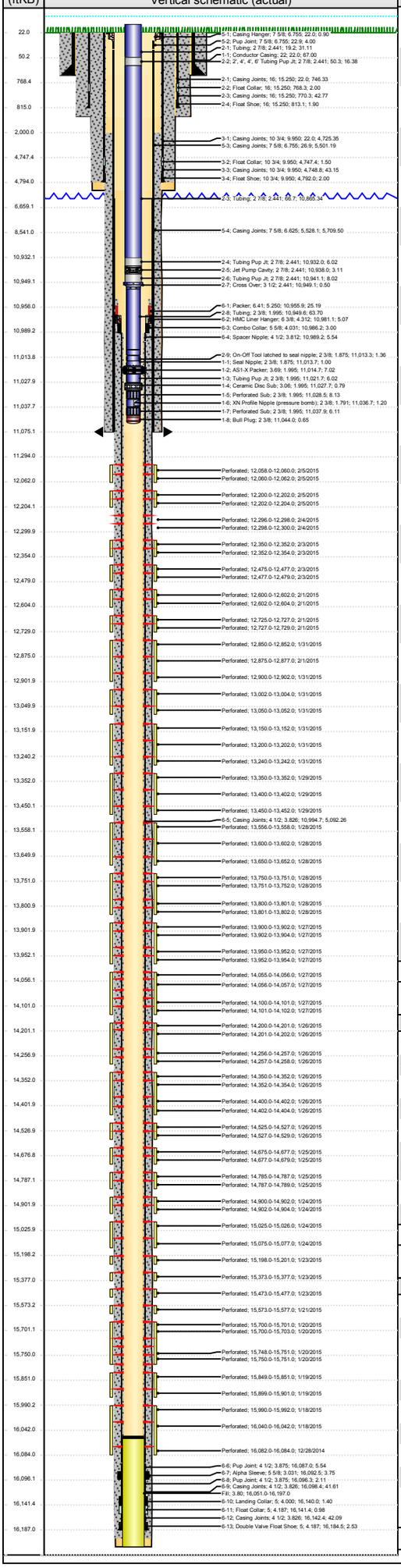
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	5,577.10	5,555.10			16,197.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
8/27/2014	2/6/2015	Central Rockies	Jared Huckabee	700.0	FSL	661.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	SW	SW			11			15	N	3	E	S

Lateral/Horizontal - Sidetrack 3, 6/4/2015 7:49:38 AM

MD (ftKB) | Vertical schematic (actual)



Stim/Treat Stages

Stage Type	Start Date	Top (ftKB)	Btm (ftKB)	Stim/Treat Fluid	Vol Clean Pump (bbl)
P&P	2/2/2015	12,600.0	12,604.0	HYBOR G 35; LINEAR 35; 7.5 HCL, <fluidtyp>	7841.45
P&P	2/1/2015	12,725.0	12,729.0	HYBOR G 35; LINEAR 35; 7.5 HCL, <fluidtyp>	7564.93
P&P	2/1/2015	12,850.0	12,902.0	HYBOR G 35; LINEAR 35; 28 HCL; 7.5 HCL, <fluidtyp>	8265.86
P&P	1/31/2015	13,002.0	13,052.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	4409.79
P&P	1/31/2015	13,150.0	13,242.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	7039.00
P&P	1/30/2015	13,350.0	13,452.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	7781.17
P&P	1/28/2015	13,556.0	13,652.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	5124.60
P&P	1/28/2015	13,750.0	13,802.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	1434.29
P&P	1/28/2015	13,900.0	13,954.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	4418.02
P&P	1/27/2015	14,055.0	14,102.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	4058.79
P&P	1/27/2015	14,200.0	14,258.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	7269.33
P&P	1/26/2015	14,350.0	14,404.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	6323.88
P&P	1/26/2015	14,525.0	14,529.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	2753.40
P&P	1/25/2015	14,675.0	14,679.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	2802.92
P&P	1/25/2015	14,785.0	14,789.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	5734.12
P&P	1/25/2015	14,900.0	14,904.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	5888.63
P&P	1/24/2015	15,025.0	15,077.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	8606.41
P&P	1/23/2015	15,198.0	15,201.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	1841.85
P&P	1/23/2015	15,373.0	15,377.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	3997.86
P&P	1/23/2015	15,473.0	15,477.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	5814.76
P&P	1/23/2015	15,573.0	15,577.0	HYBOR G 35; LINEAR 35; 15 HCL, <fluidtyp>	3616.49
P&P	1/20/2015	15,700.0	15,751.0	PHASERFRAC 35; LINEAR 35; 15 HCL, <fluidtyp>	7688.81
P&P	1/19/2015	15,849.0	15,901.0	PHASERFRAC 35; LINEAR 35; 15 HCL, <fluidtyp>	4044.98
P&P	1/19/2015	15,990.0	16,084.0	PHASERFRAC 35; LINEAR 35; 15 HCL, <fluidtyp>	9579.36

Packer Assembly set at 11,044.6ftKB on 5/5/2015 06:00

Set Depth (ftKB)	Comment	Run Date	Pull Date
11,044.6		5/5/2015	

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Seal Nipple	2 3/8	1.875				1.00	11,013.7	11,014.7
AS1-X Packer	3.69	1.995				7.02	11,014.7	11,021.7
Tubing Pup Jt	2 3/8	1.995	4.70	N-80		6.02	11,021.7	11,027.7
Ceramic Disc Sub	3.06	1.995				0.79	11,027.7	11,028.5
Perforated Sub	2 3/8	1.995	4.60	N-80		8.13	11,028.5	11,036.7
XN Profile Nipple (pressure bomb)	2 3/8	1.791				1.20	11,036.7	11,037.9
Perforated Sub	2 3/8	1.995	4.60	N-80		6.11	11,037.9	11,044.0
Bull Plug	2 3/8					0.65	11,044.0	11,044.6

Tubing - Production set at 11,014.7ftKB on 5/12/2015 15:00

Set Depth (ftKB)	Comment	Run Date	Pull Date
11,014.7		5/12/2015	

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing	2 7/8	2.441	6.50	L-80	1	31.11	19.2	50.3
2', 4', 4', 6' Tubing Pup Jt	2 7/8	2.441	6.50	N-80	4	16.38	50.3	66.7
Tubing	2 7/8	2.441	6.50	L-80	360	10,865.34	66.7	10,932.0
Tubing Pup Jt	2 7/8	2.441	6.50	N-80		6.02	10,932.0	10,938.0
Jet Pump Cavity	2 7/8	2.441				3.11	10,938.0	10,941.1
Tubing Pup Jt	2 7/8	2.441	6.50	N-80	1	8.02	10,941.1	10,949.1
Cross Over	3 1/2	2.441				0.50	10,949.1	10,949.6
Tubing	2 3/8	1.995	4.70	L-80	2	63.70	10,949.6	11,013.3
On-Off Tool latched to seal nipple	2 3/8	1.875				1.36	11,013.3	11,014.7

RECEIVED: Jun. 04, 2015

Lease Review All - CR

Well Name: MORONI 11M-1107

API Number	WPC ID	Well Permit Number	Field Name	County	State
430395000500	1UT030800		Wildcat	Sanpete	UT

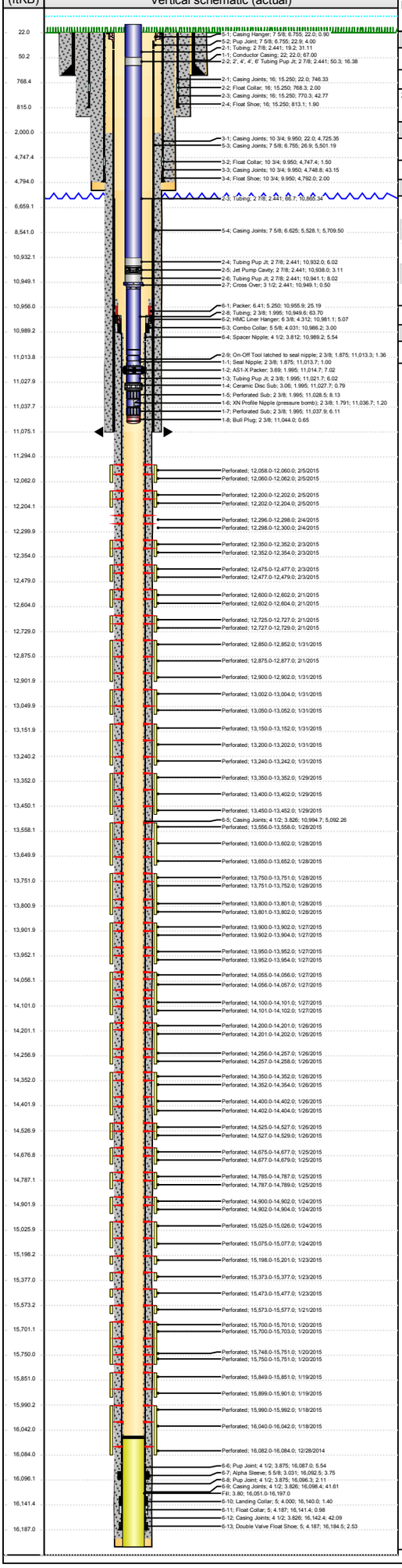
Well Configuration Type	Orig KB Elv (ft)	Ground Elevation (ft)	Casing Flange Elevation (ft)	Tubing Head Elevation (ft)	Total Depth (ftKB)
Lateral/Horizontal	5,577.10	5,555.10			16,197.0

Original Spud Date	Completion Date	Asset Group	Responsible Engineer	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
8/27/2014	2/6/2015	Central Rockies	Jared Huckabee	700.0	FSL	661.0	FWL

Lot	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Section Suffix	Section Type	Township	Township N/S Dir	Range	Range E/W Dir	Meridian
	SW	SW			11			15	N	3	E	S

Lateral/Horizontal - Sidetrack 3, 6/4/2015 7:49:38 AM

MD (ftKB) | Vertical schematic (actual)



Rod Strings

<des> on <dttmrun>

Rod Description	Run Date	Pull Date

Item Des	OD (in)	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)

Other Strings

Set Depth (ftKB)	Comment	Run Date	Pull Date

Item Des	OD (in)	ID (in)	Len (ft)	Top (ftKB)	Btm (ftKB)

Other In Hole

Des	OD (in)	ID (in)	Run Date	Pull Date	Top (ftKB)	Btm (ftKB)
Whipstock	6	5.750	11/11/2014		11,075.0	11,089.0
Cast Iron Bridge Plug	6 5/8		11/10/2014		11,094.0	11,098.0
Whipstock	6	5.750	11/6/2014		11,172.0	11,194.0
Whipstock	6	5.750	11/3/2014		11,238.0	11,259.0
Fill	3.8		3/15/2015		16,051.0	16,197.0

Bottom Hole Cores

Date	Core #	Top (ftKB)	Btm (ftKB)	Recov (ft)

RECEIVED: Jun. 04, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER: Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER: 43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY: SANPETE

STATE: UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion: 8/3/2015
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Pit Closure

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

The pit on this location has been closed. See attached for procedure used, pictures, and sign off from Mark Jones.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
November 02, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	8/13/2015

RECEIVED: Aug. 13, 2015

Sundry Number: 63976 API Well Number: 43039500050000

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER: Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER: 43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY: SANPETE

STATE: UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 6/12/2015	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Reserve pit closure

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

Whiting Oil and Gas Corporation proposes to close the reserve pit on the Moroni 11M-1107 well. Please see the attached procedure proposals.

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician
SIGNATURE		**DATE**
N/A		6/17/2015

RECEIVED: Jun. 17, 2015

Sundry Number: 63976 API Well Number: 43039500050000

Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation

1700 Broadway, Suite 2300, Denver, CO 80290-2300
Phone: 303.837.1661 | FAX: 303.861.4023

Division of Oil, Gas and Mining
ATTN: Mark Jones, Petroleum Specialist
319 N Carbonville Rd #C
Price, Utah 84501-2351

12 June 2015

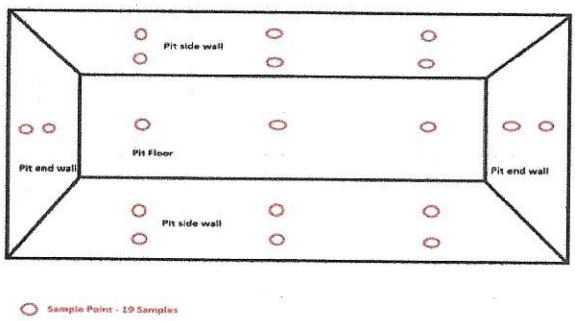
RE: Moroni 11M-1107 Pit Sampling and Pit Liner Disposition

To Mr. Mark Jones:

Thank you for making the time to meet with Shane Campbell, SCAMP Excavation, Scott Swain, Whiting Oil and Gas and myself at the Moroni location on 11 June 2015. As per our discussion, I am providing this guidance document for collection of the confirmation samples and disposition of the pit liner.

Whiting Oil and Gas (WOG) will contract HCSI, Inc. out of Grand Junction, Colorado to collect the confirmation samples from the pit. The samples will be analyzed by ALS Laboratories for Total Petroleum Hydrocarbons (TPH), BTEX, Electrical Conductivity (EC), Sodium Absorption Ration (SAR) and Soil pH. Soil salinity will be derived from analyzed constituents.

The following diagram depicts sample collection locations. Please note the drawing is not to scale.



The liner will be washed, cut to 20' strips and baled. A contractor working through HCSI, Inc. will collect the liner and the liner will be placed into a recycling stream.

If you have any further questions, please feel free to contact me at 970.319.0498 or edward.winters@whiting.com.

Respectfully,

Edward T. Winters
Environmental Coordinator III
Whiting Oil and Gas
2500 County Road 26
Rifle, Colorado 81650

RECEIVED: Jun. 17, 2015

Whiting Oil and Gas
Moroni 11M-1107 Investigation: Analytical Results

	Sample Location																		
COGCC Table 910-1 Analyte Suite	North Wall East End @ 8 Feet	North Wall East End @ 15 Feet	South Wall East End @ 8 Feet	South Wall East End @ 15 Feet	North Wall Center @ 8 Feet	North Wall Center @ 15 Feet	South Wall Center @ 8 Feet	South Wall Center @ 15 Feet	North Wall West End @ 8 Feet	North Wall West End @ 15 Feet	South Wall West End @ 8 Feet	Soputh Wall West End @ 15 Feet	East Wall @ 8 Feet	East Wall @ 15 Feet	West Wall @ 8 Feet	West Wall @ 15 Feet	Pit Bottom East End	Pit Bottom Center	Pit Bottom West End
Sample Date	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015	6/18/2015
Organics																			
TEPH (DRO)	18	21	25	37	16	31	18	90	400	730	19	20	15	29	2,900	1,300	18	100	550
TVPH (GRO)	ND	ND	ND	ND	ND	ND	ND	ND	ND	53	ND	ND	ND	ND	ND	66	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.039	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XYLENE TOTAL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41	ND	ND	ND
Inorganics																			
Sodium Absorption Ratio (unitless)	1.0	4.3	2.9	4.6	3.6	3.3	6.3	3.5	5.9	3.5	8.3	3.1	2.2	4.4	6.4	3.9	11	11	7.6
Electric Conductivity (mmhos/cm)	1.9	7.8	14	8.2	2.2	6.9	11	7.3	11	2.3	19	2.5	1.3	7.2	26	7.7	12	6.2	9.2
pH (unitless)	9.1	8.0	8.1	8.3	9.3	7.9	8.0	8.5	8.7	8.8	8.4	8.3	8.4	8.0	8.1	8.2	8.6	8.6	7.6

all results in mg/kg unless noted
NS=no sample
ND=non detect

Scott Swain

From: Mark Jones <markjones@utah.gov>
Sent: Thursday, July 09, 2015 4:55 PM
To: Scott Swain
Subject: Re: Moroni pit

Sorry I have just sat at a computer for the first time in many days.

The pit is fine to close out at this point. I looked at it with Shane and Lee yesterday. I'm not concerned about the elevated numbers in those few samples. The numbers aren't that high and the total affected areas are very small it appears to me.

Proceed with the closure as outlined in your original plan.

Will you pass this on to your Enviro guy, Ed, please?

Mark

On Thu, Jul 9, 2015 at 11:23 AM, Scott Swain <scott.swain@whiting.com> wrote:
Mark
Thanks for taking the time to look over the pit and the test results.
Please shoot me an email on your final decision on the close out of the pit.
Thanks again for always making time to go over things.

Scott

Sent from my iPhone

Scott Swain
Operations Supervisor
Whiting Petroleum Corporation
and its wholly owned subsidiary

Sundry Number: 63976 API Well Number: 43039500050000

Scamp Excavation, Inc
PO Box 50, Wellington, UT 84542
Phone: (435) 636-8101 Fax: (435) 637-5696
E-Mail: SEOPLLC@EMERYTELCOM.NET

"24 hours a day, 7 days a week"

June 12, 2015

Whiting Petroleum Corporation
Attn: Scott Swain; Edward Winters
And Mark Jones

Re: Moroni 11M-1107 – Liner Removal and Final Pit Reclamation

Cut liner into 20ft strips, the width of the pit
Pressure was the liner, than fold the liner
Repeat the procedure until the liner is removed from the pit

Once removed we will have the Baylor bale them for re-cycle

The liner that remains around the top of the pit, that is not damaged will be cleaned and folded for Baylor. The small pieces of liner will be placed in a truck and hauled to the ECDC Landfill.

When the pit is cleaned and passes testing, we will place 3ft of 3" rock in the bottom of the pit an place a filter fabric other the top of the rocks and will start backfilling 18" to 24" lifts. We will compact and repeat the steps until the pit is full.

Thank-you

Shane Campbell
President/Scamp Excavation, Inc.

RECEIVED: Jun. 17, 2015

Sundry Number: 63976 API Well Number: 43039500050000

Scamp Excavation, Inc
PO Box 50, Wellington, UT 84542
Phone: (435) 636-8101 Fax: (435) 637-5696
E-Mail: SEOPLLC@EMERYTELCOM.NET

"24 hours a day, 7 days a week"

June 12, 2015

Whiting Petroleum Corporation
Attn: Scott Swain; Edward Winters
And Mark Jones

Re: Moroni 11M-1107 – French Drain

Install a French Drain on the North and East sides of the location.
We will start at the Southeast end of the location towards the North end of the location, then towards the Northwest end of the location

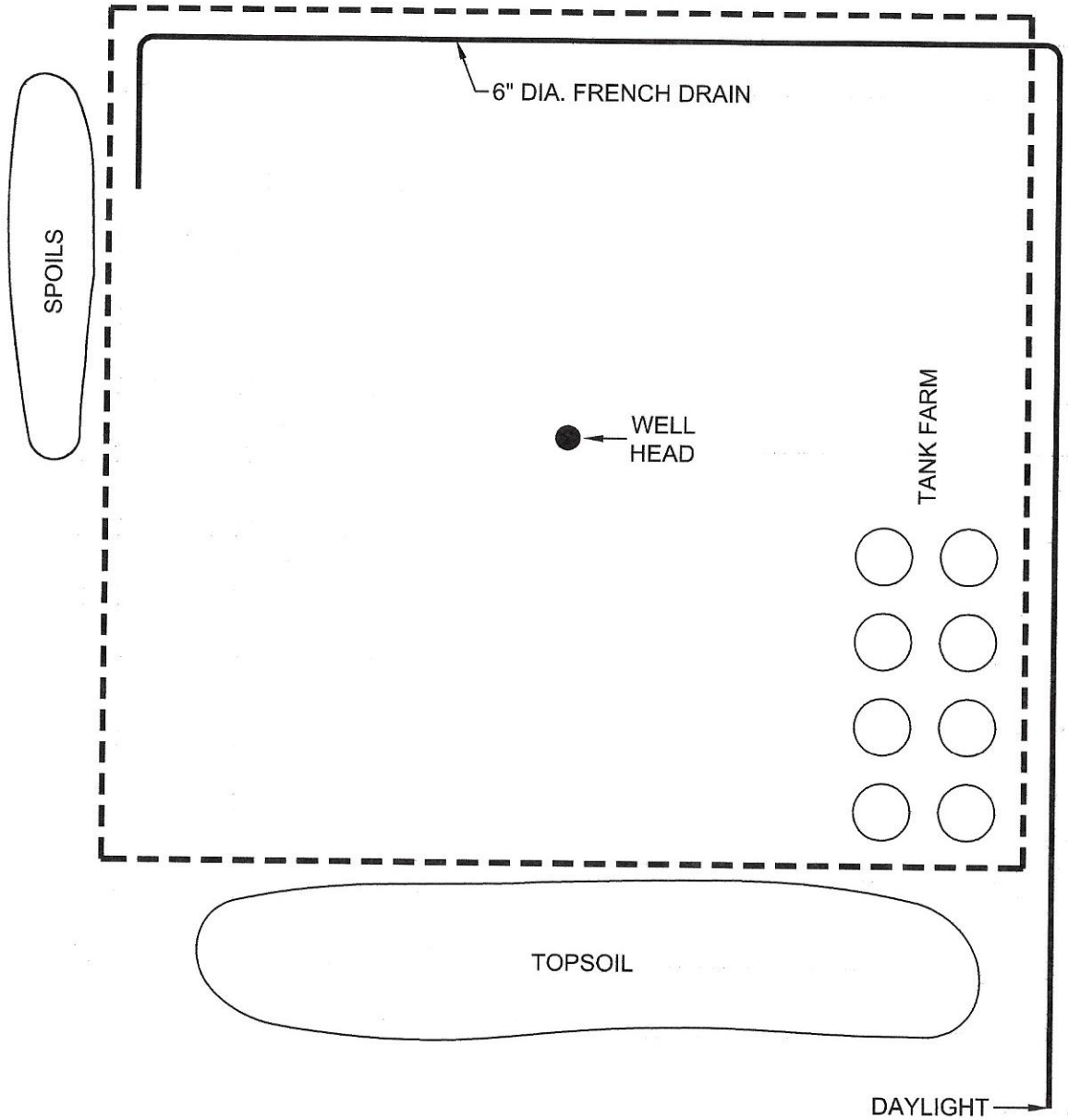
We will install 3" of rock in the bottom of the trench, place 3" perforated pipe with the holes to the top of the pipe. Place the filter fabric over the pipe then install 18" to 24" of rock in the trench. Place more filter fabric over the rock then backfill the trench.

Thank-you

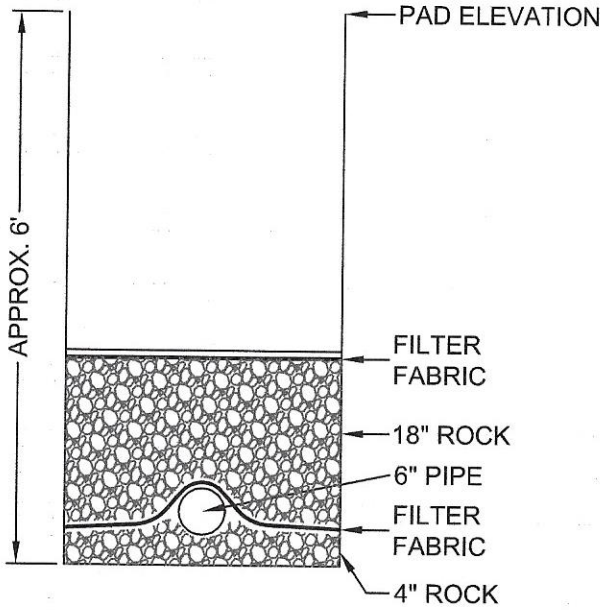
Shane Campbell
President/Scamp Excavation, Inc.

RECEIVED: Jun. 17, 2015

MORONI LOCATION

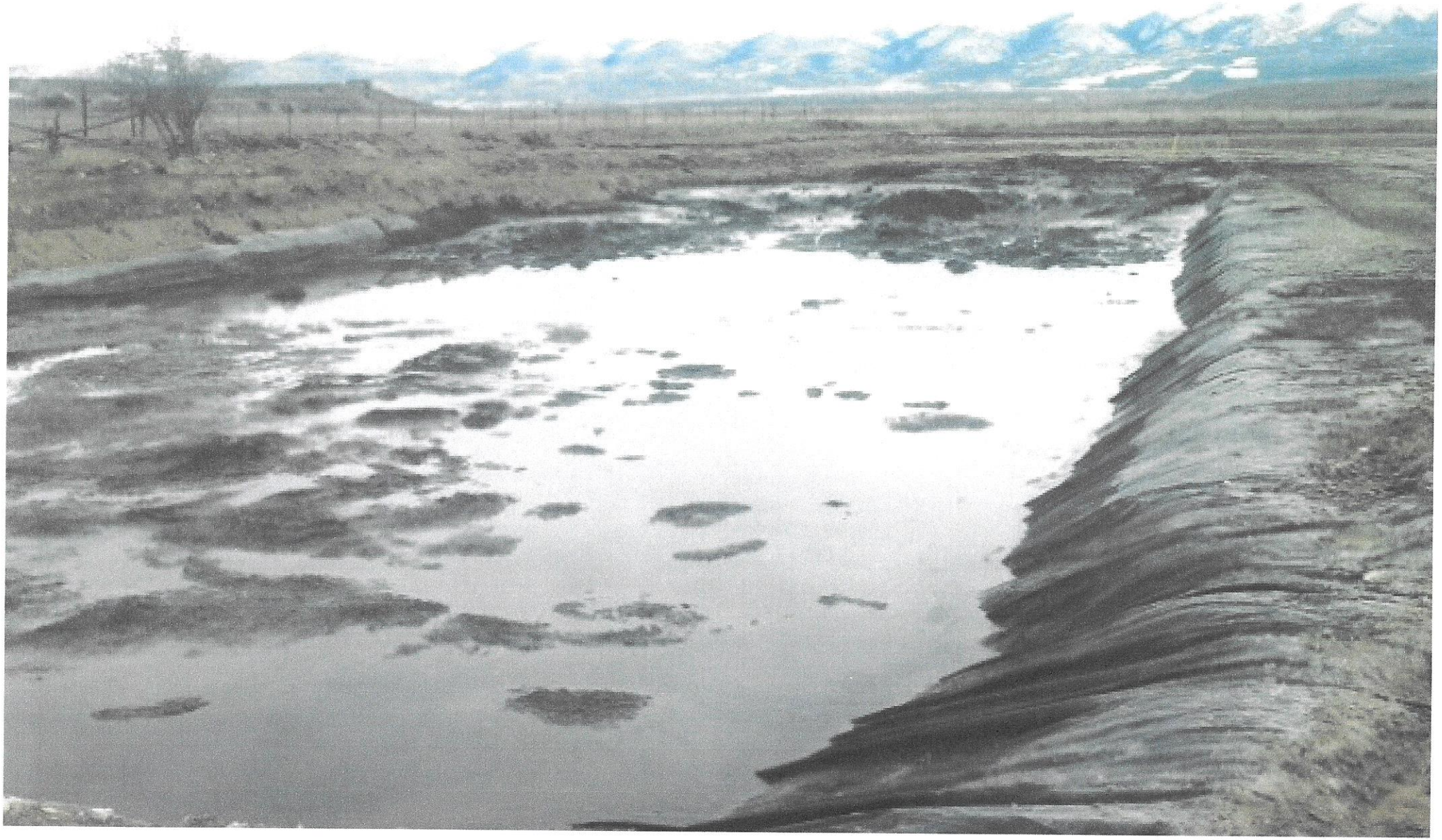


FRENCH DRAIN DETAIL

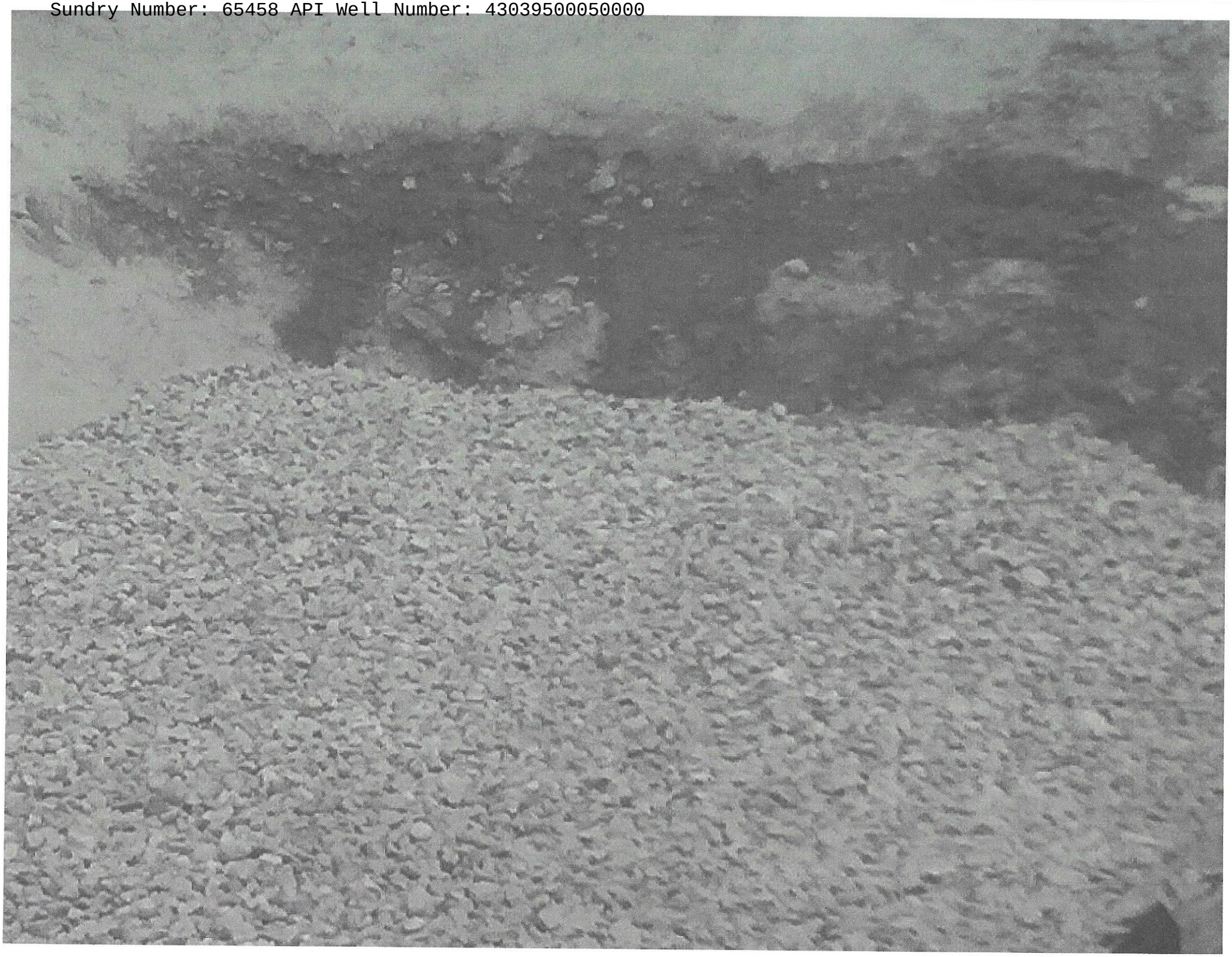


Sundry Number: 63976 API Well Number: 43039500050000

RECEIVED: Jun. 17, 2015



CAT



Sundry Number: 65458 API Well Number: 43039500050000

SUNBELT RENTALS

Scott Swain

From: Mark Jones <markjones@utah.gov>
Sent: Monday, August 03, 2015 10:50 AM
To: Scott Swain
Cc: Dan Jarvis
Subject: Re: Emailing: IMG_20150715_124522.jpg, IMG_20150715_144001.jpg, IMG_20150715_144056.jpg, IMG_20150716_142110.jpg, IMG_20150720_120746.jpg, IMG_20150722_140217.jpg, NCM_0346.jpg, NCM_0348.jpg, NCM_0349.jpg, NCM_0350.jpg, NCM_0351.jpg, NCM_0352.jpg

This pit cleanup has gone really well throughout the job. Not quite as well taken care of during the initial phase of cleaning out as I would have liked, however the end result has been accomplished and looks great. I appreciate the work put into taking care of this mess. This pit cleanup is completed at this point as far as I am concerned.

Mark

On Fri, Jul 31, 2015 at 6:43 PM, Scott Swain <scott.swain@whiting.com> wrote:
Moroni pit work

Sent from my iPhone

Scott Swain
Operations Supervisor
Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation
Direct (435) 781-1804

The information contained in this message may be privileged and confidential and protected from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by replying to this message and deleting it from your computer.

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 6/12/2015	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Reserve pit closure

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

Whiting Oil and Gas Corporation proposes to close the reserve pit on the Moroni 11M-1107 well. Please see the attached procedure proposals.

Approved by the
Utah Division of
Oil, Gas and Mining
Date: December 17, 2015
By: Dan Jarvis

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician
SIGNATURE		**DATE**
N/A		6/17/2015

Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation

1700 Broadway, Suite 2300, Denver, CO 80290-2300
Phone: 303.837.1661 | FAX: 303.861.4023

Division of Oil, Gas and Mining
ATTN: Mark Jones, Petroleum Specialist
319 N Carbonville Rd #C
Price, Utah 84501-2351

12 June 2015

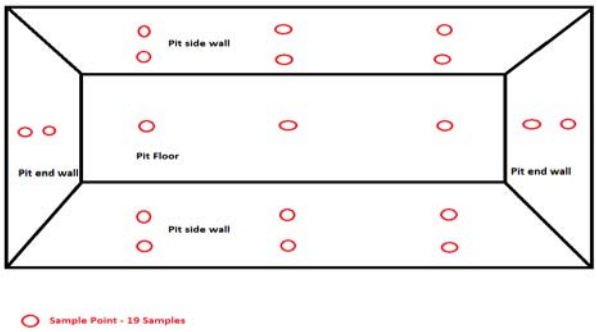
RE: Moroni 11M-1107 Pit Sampling and Pit Liner Disposition

To Mr. Mark Jones:

Thank you for making the time to meet with Shane Campbell, SCAMP Excavation, Scott Swain, Whiting Oil and Gas and myself at the Moroni location on 11 June 2015. As per our discussion, I am providing this guidance document for collection of the confirmation samples and disposition of the pit liner.

Whiting Oil and Gas (WOG) will contract HCSI, Inc. out of Grand Junction, Colorado to collect the confirmation samples from the pit. The samples will be analyzed by ALS Laboratories for Total Petroleum Hydrocarbons (TPH), BTEX, Electrical Conductivity (EC), Sodium Absorption Ration (SAR) and Soil pH. Soil salinity will be derived from analyzed constituents.

The following diagram depicts sample collection locations. Please note the drawing is not to scale.



The liner will be washed, cut to 20' strips and baled. A contractor working through HCSI, Inc. will collect the liner and the liner will be placed into a recycling stream.

If you have any further questions, please feel free to contact me at 970.319.0498 or edward.winters@whiting.com.

Respectfully,

Edward T. Winters
Environmental Coordinator III
Whiting Oil and Gas
2500 County Road 26
Rifle, Colorado 81650

RECEIVED: Jun. 17, 2015

Scamp Excavation, Inc
PO Box 50, Wellington, UT 84542
Phone: (435) 636-8101 Fax: (435) 637-5696
E-Mail: SEOPLLC@EMERYTELCOM.NET

"24 hours a day, 7 days a week"

June 12, 2015

Whiting Petroleum Corporation
Attn: Scott Swain; Edward Winters
And Mark Jones

Re: Moroni 11M-1107 – Liner Removal and Final Pit Reclamation

Cut liner into 20ft strips, the width of the pit
Pressure was the liner, than fold the liner
Repeat the procedure until the liner is removed from the pit

Once removed we will have the Baylor bale them for re-cycle

The liner that remains around the top of the pit, that is not damaged will be cleaned and folded for Baylor. The small pieces of liner will be placed in a truck and hauled to the ECDC Landfill.

When the pit is cleaned and passes testing, we will place 3ft of 3" rock in the bottom of the pit an place a filter fabric other the top of the rocks and will start backfilling 18" to 24" lifts. We will compact and repeat the steps until the pit is full.

Thank-you

Shane Campbell
President/Scamp Excavation, Inc.

RECEIVED: Jun. 17, 2015

Scamp Excavation, Inc
PO Box 50, Wellington, UT 84542
Phone: (435) 636-8101 Fax: (435) 637-5696
E-Mail: SEOPLLC@EMERYTELCOM.NET

"24 hours a day, 7 days a week"

June 12, 2015

Whiting Petroleum Corporation
Attn: Scott Swain; Edward Winters
And Mark Jones

Re: Moroni 11M-1107 – French Drain

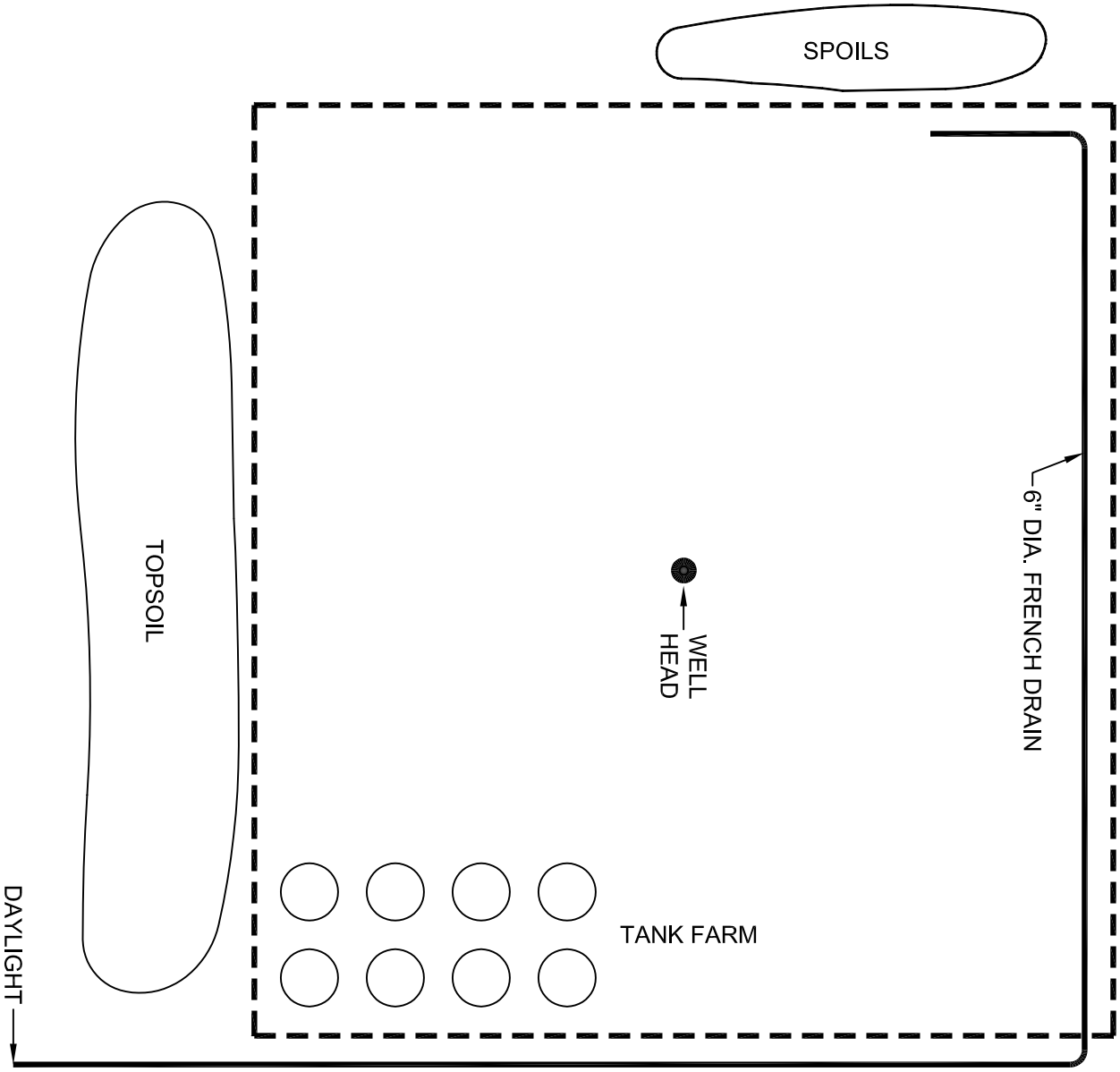
Install a French Drain on the North and East sides of the location.
We will start at the Southeast end of the location towards the North end of the location, then towards the Northwest end of the location

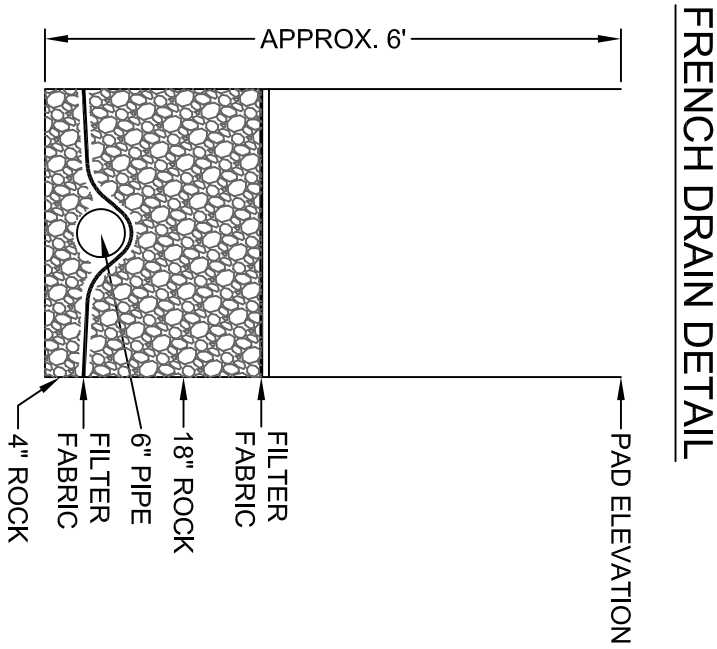
We will install 3" of rock in the bottom of the trench, place 3" perforated pipe with the holes to the top of the pipe. Place the filter fabric over the pipe then install 18" to 24" of rock in the trench. Place more filter fabric over the rock then backfill the trench.

Thank-you

Shane Campbell
President/Scamp Excavation, Inc.

RECEIVED: Jun. 17, 2015





RECEIVED: Jun. 17, 2015

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion:
  12/22/2015
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Pursuant to Docket No. 2015-001, Cause 176-05 please find the following: The Moroni 11M-1107 was shut in on 12/22/15 due to low oil and gas prices and downhole mechanical problems. At the time of shut-in the well was producing approximately 30 barrels of oil per day (BOPD) and 120 thousand cuft per day of gas (MCFD). At the time of shut-in cumulative oil and gas production respectively was 19,068 barrels of oil and 56.9 million cuft of gas and 49,576 barrels of water.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
May 12, 2016

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	3/29/2016

RECEIVED: Mar. 29, 2016

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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.

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: Moroni 11M-1107

2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION

9. API NUMBER: 43039500050000

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER: 303 390-4095 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY: SANPETE

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ✓ NOTICE OF INTENT — Approximate date work will start: 5/31/2015
- ☐ SUBSEQUENT REPORT — Date of Work Completion:
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Notice of Additional Flaring E

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

Please see attachment for details.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: May 31, 2016

By: Dark K Quist

Please Review Attached Conditions of Approval

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician
SIGNATURE N/A		**DATE** 5/26/2016

RECEIVED: May. 26, 2016

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43039500050000

Please see requirements of Board Cause 176-05. Do not exceed 50 MMCF flared. Submit tolling information and amount flared to Division via subsequent sundry and also to Board file as required by Order.

RECEIVED: May. 31, 2016

Work on the Moroni well will start on Tuesday, May 31st. The work will involve flowing the well at substantially increased rates to attempt to correct some well problems. Temporary flaring equipment with greater flaring capacity will be required due to increased gas flow rates during the work. All gas from the well will run through our surface equip and go to either the Whiting Oil And Gas Corporation combustors or the rental flaring equipment and will be metered before flaring. This process could take 7-10 days to complete.

The exact amount of gas flaring we will see is unknown as the well has been shut-in for several months and will come on at an increased rate due to a build-up of bottomhole pressure near the wellbore that had previously been drawn down. We tried to flow the well earlier this week, but could not handle the gas produced with the flaring equipment on site. We will be flowing the well very aggressively in an attempt to increase tubing velocity to recover fibers from dissolvable bridge plugs left in the lateral. These fibers have plugged our production equipment and adversely impacted production in the past. Initial instantaneous rates could be 3-5 MMCFPD, but we expect those rates to decline quite rapidly, probably within a few hours, and we suspect average rates over the 7-10 day period to be 1 MMCFPD or less. We fully expect the well to return to its normal flaring rate of 150-200 MCFPD within ten days.

RECEIVED: May. 26, 2016

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ SUBSEQUENT REPORT Date of Work Completion: 5/27/2016	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Pursuant to Docket No 2015-001, Cause 176-05, please find the following: The Moroni 11M-1107 returned to production on May 27, 2016. Cumulative volumes produced prior to the return to production are as follows: 19,068 bbls oil, 56.9 million cu ft of gas and 49,576 bbls water.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
June 07, 2016

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician

SIGNATURE	DATE
N/A	6/7/2016

RECEIVED: Jun. 07, 2016

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: Patented

SUNDRY NOTICES AND REPORTS ON WELLS

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:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Moroni 11M-1107

2. NAME OF OPERATOR:
WHITING OIL & GAS CORPORATION

9. API NUMBER:
43039500050000

3. ADDRESS OF OPERATOR:
1700 Broadway, Suite 2300 , Denver, CO, 80290 2300

PHONE NUMBER:
303 390-4095 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0700 FSL 0661 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSW Section: 11 Township: 15.0S Range: 03.0E Meridian: S

COUNTY:
SANPETE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ SUBSEQUENT REPORT Date of Work Completion: 9/16/2016	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Status Update

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

Pursuant to Flaring Order (Docket 2015-001, Cause 176-05), Whiting Oil and Gas respectfully submits the following status update. The Moroni was returned to production 5/26/16. The well flowed during the following timeframes, but would not produce without periods of buildup: 5/26/16-5/27/16, 6/1/16-6/2/16, 6/8/16-6/11/16, 6/14/16-6/17/16, 7/12/16-7/13/16. The well did not flow during August 2016. A combustor was swapped out to handle more capacity and the well was brought online 9/16/16. Since the flaring order was approved, the well has produced a total of 16 days and a volume of 1516 bbls Oil, 3.9 MMcf, and 477 bbls Water. Overall the cumulative production through July 2016 is 20,584 bbls Oil, 60.8 MMcf Gas, 50,053 bbls Water.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
September 22, 2016

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mezydlo	303 876-7091	Engineering Technician
SIGNATURE		**DATE**
N/A		9/21/2016

RECEIVED: Sep. 21, 2016