

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 NBU 1022-12N1BS-R				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT NATURAL BUTTES				
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES				
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.						7. OPERATOR PHONE 720 929-6515				
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217						9. OPERATOR E-MAIL julie.jacobson@anadarko.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UO 01197-A			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						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 <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		1265 FSL 2358 FEL		SWSE	12	10.0 S	22.0 E	S		
Top of Uppermost Producing Zone		1242 FSL 2147 FWL		SESW	12	10.0 S	22.0 E	S		
At Total Depth		1242 FSL 2147 FWL		SESW	12	10.0 S	22.0 E	S		
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1242			23. NUMBER OF ACRES IN DRILLING UNIT 1674				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 807			26. PROPOSED DEPTH MD: 8572 TVD: 8450				
27. ELEVATION - GROUND LEVEL 5231			28. BOND NUMBER 22013542			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8496				
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	11	8.625	0 - 2250	28.0	J-55 LT&C	0.2	Type V	180	1.15	15.8
							Class G	270	1.15	15.8
Prod	7.875	4.5	0 - 8572	11.6	I-80 LT&C	12.5	Premium Lite High Strength	280	3.38	12.0
							50/50 Poz	1180	1.31	14.3
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Cara Mahler			TITLE Regulatory Analyst I			PHONE 720 929-6029				
SIGNATURE			DATE 06/26/2012			EMAIL cara.mahler@anadarko.com				
API NUMBER ASSIGNED 43047528730000			APPROVAL			 Permit Manager				

RECEIVED: July 02, 2012

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 1022-12N1BS-R**

Surface: 1265 FSL / 2358 FEL SWSE
 BHL: 1242 FSL / 2147 FWL SESW

Section 12 T10S R22E

Uintah County, Utah
 Mineral Lease: ST UT UO 01197A

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,121'	
Birds Nest	1,333'	Water
Mahogany	1,800'	Water
Wasatch	4,097'	Gas
Mesaverde	6,272'	Gas
Sego	8,442'	Gas
TVD	8,450'	
TD	8,572'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 8450' TVD, approximately equals
5,155 psi (0.61 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,318 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-

(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.

Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

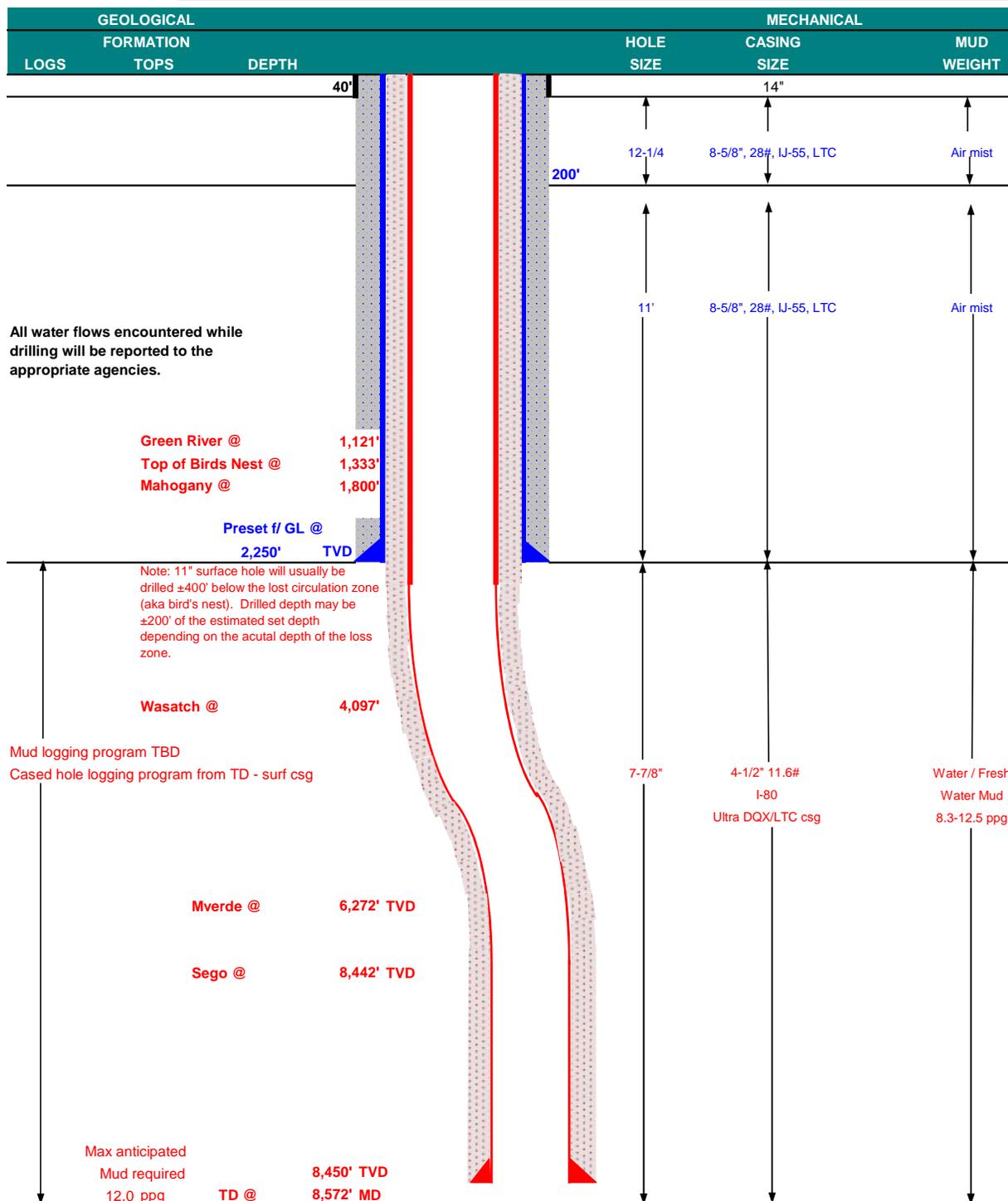
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	June 26, 2012			
WELL NAME	NBU 1022-12N1BS-R		TD	8,450'	TVD	8,572' MD	
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	5,231'
SURFACE LOCATION	SWSE	1265 FSL	2358 FEL	Sec 12	T 10S	R 22E	
	Latitude: 39.959699		Longitude: -109.386598		NAD 27		
BTM HOLE LOCATION	SESW	1242 FSL	2147 FWL	Sec 12	T 10S	R 22E	
	Latitude: 39.959642		Longitude: -109.389455		NAD 27		
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: UDOGM (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept.						





KERR-McGEE OIL & GAS ONSHORE LP
DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	LTC		DQX
							COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'				3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 2,250	28.00	IJ-55	LTC	2.40	1.79	6.31	N/A
						7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	1.20		3.29
						7,780	6,350	223,000	267,035
						4-1/2"	5,000 to 8,572'	11.60	I-80

Surface casing:

(Burst Assumptions: TD = 12.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe
 Fracture at surface shoe with 0.1 psi/ft gas gradient above
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD 500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
	TOP OUT CMT (6 jobs) 1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
NOTE: If well will circulate water to surface, option 2 will be utilized						
SURFACE Option 2	LEAD 1,750'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	160	35%	11.00	3.82
	TAIL 500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD 3,592'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	280	35%	12.00	3.38
	TAIL 4,980'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,180	35%	14.30	1.31

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
 *Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

Nick Spence / Danny Showers / Travis Hansell

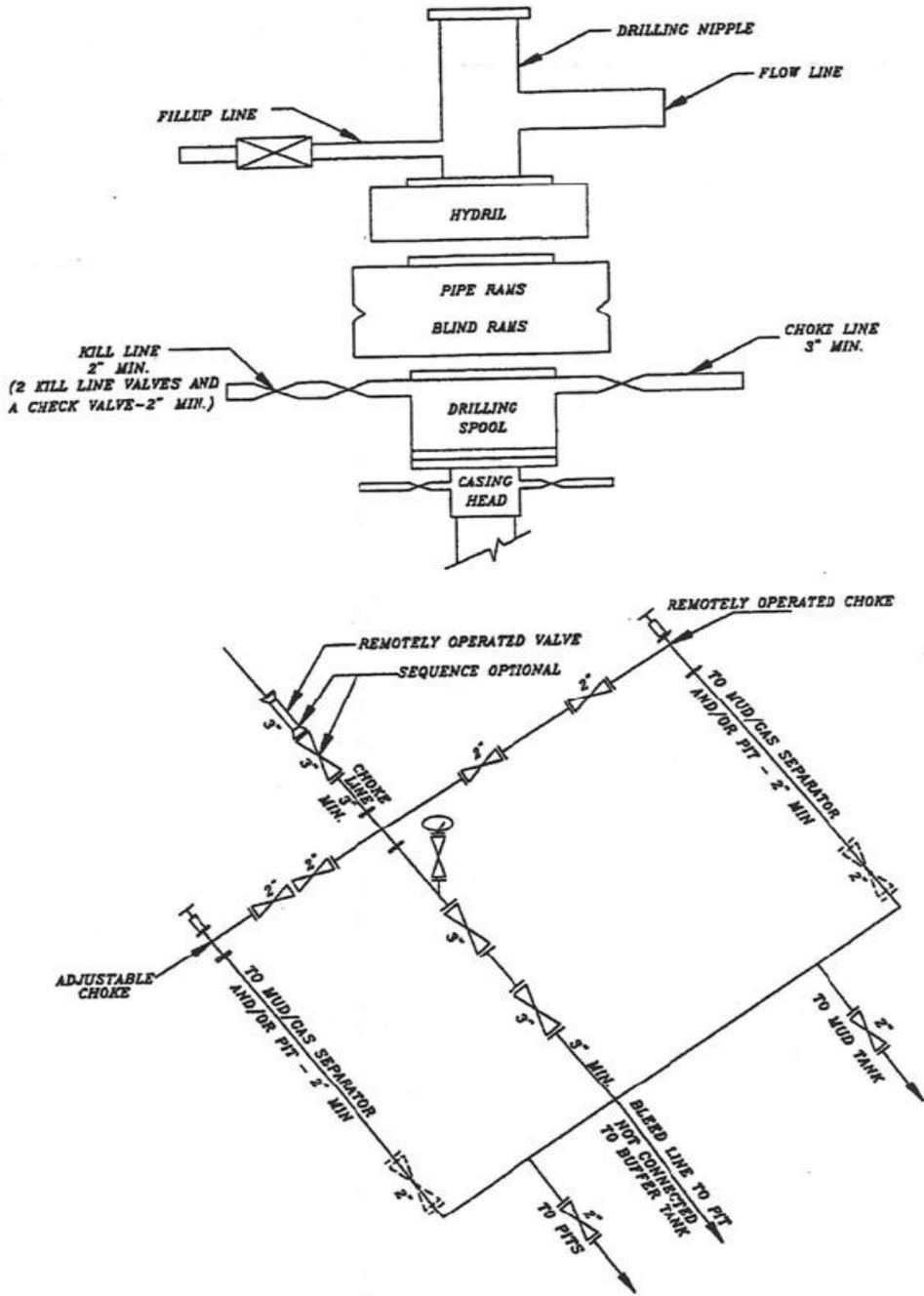
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:

EXHIBIT A NBU 1022-12N1BS-R



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

T10S, R22E, S.L.B.&M.

Found 1991 Aluminum Cap with Pile of Stones. Fence Post on SE side of Cap.

S89°59'W - 40.01 (G.L.O.)
S89°57'13"W - 2640.76' (Meas.)

N89°39'W - 40.01 (G.L.O.)
N89°41'22"W - 2640.46' (Meas.)

Found 1991 Aluminum Cap in Pile of Stones. Fence Post on North side of Cap.

Found 1991 Aluminum Cap in Pile of Stones.

NBU 1022-12N1BS-R (Surface Position)
NAD 83 LATITUDE = 39.959665° (39° 57' 34.794")
LONGITUDE = 109.387278° (109° 23' 14.201")
NAD 27 LATITUDE = 39.959699° (39° 57' 34.917")
LONGITUDE = 109.386598° (109° 23' 11.752")

NBU 1022-12N1BS-R (Bottom Hole)
NAD 83 LATITUDE = 39.959608° (39° 57' 34.590")
LONGITUDE = 109.390135° (109° 23' 24.488")
NAD 27 LATITUDE = 39.959642° (39° 57' 34.713")
LONGITUDE = 109.389455° (109° 23' 22.038")

N0°01'W (G.L.O.)
N00°25'25"E - 5276.36' (Meas.)

Not Monumented

12

**WELL LOCATION:
NBU 1022-12N1BS-R**

ELEV. UNGRADED GROUND = 5233.2'

Found 1991 Aluminum Cap with Pile of Stones. Fence Post on North side of Cap.

N00°03'41"E - 2640.93' (Meas.)
N0°07'E - 40.02 (G.L.O.)

N00°05'48"E (Basis of Bearings)
2634.07' (Measured)
N0°09'E - 39.91 (G.L.O.)

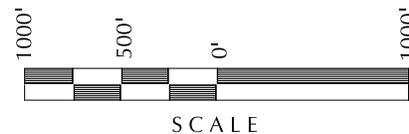
Found Uintah County Aluminum Cap on 3/4" rebar. Pile of Stones

N89°52'55"W - 5312.93' (Meas.)
S89°59'W - 80.02 (G.L.O.)

Found 1991 Aluminum Cap in Pile of Stones. Fence Post on East side of Cap.

NOTES:

- ▲ = Section Corners Located
- 1. Well footages are measured at right angles to the Section Lines.
- 2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- 3. The Bottom of hole bears S88°28'31"W 801.48' from the Surface Position.
- 4. Bearings are based on Global Positioning Satellite observations.
- 5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.



SURVEYOR'S CERTIFICATE

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.

John R. Slough
No. 6028691
JOHN R. SLAUGH
PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202



609 CONSULTING, LLC
2155 North Main Street
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 01-21-11	SURVEYED BY: R.Y.	SHEET NO: 6
DATE DRAWN: 02-03-11	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'	Date Last Revised: 6-14-12 J.G.C.	6 OF 18

WELL PAD: NBU 1022-12O

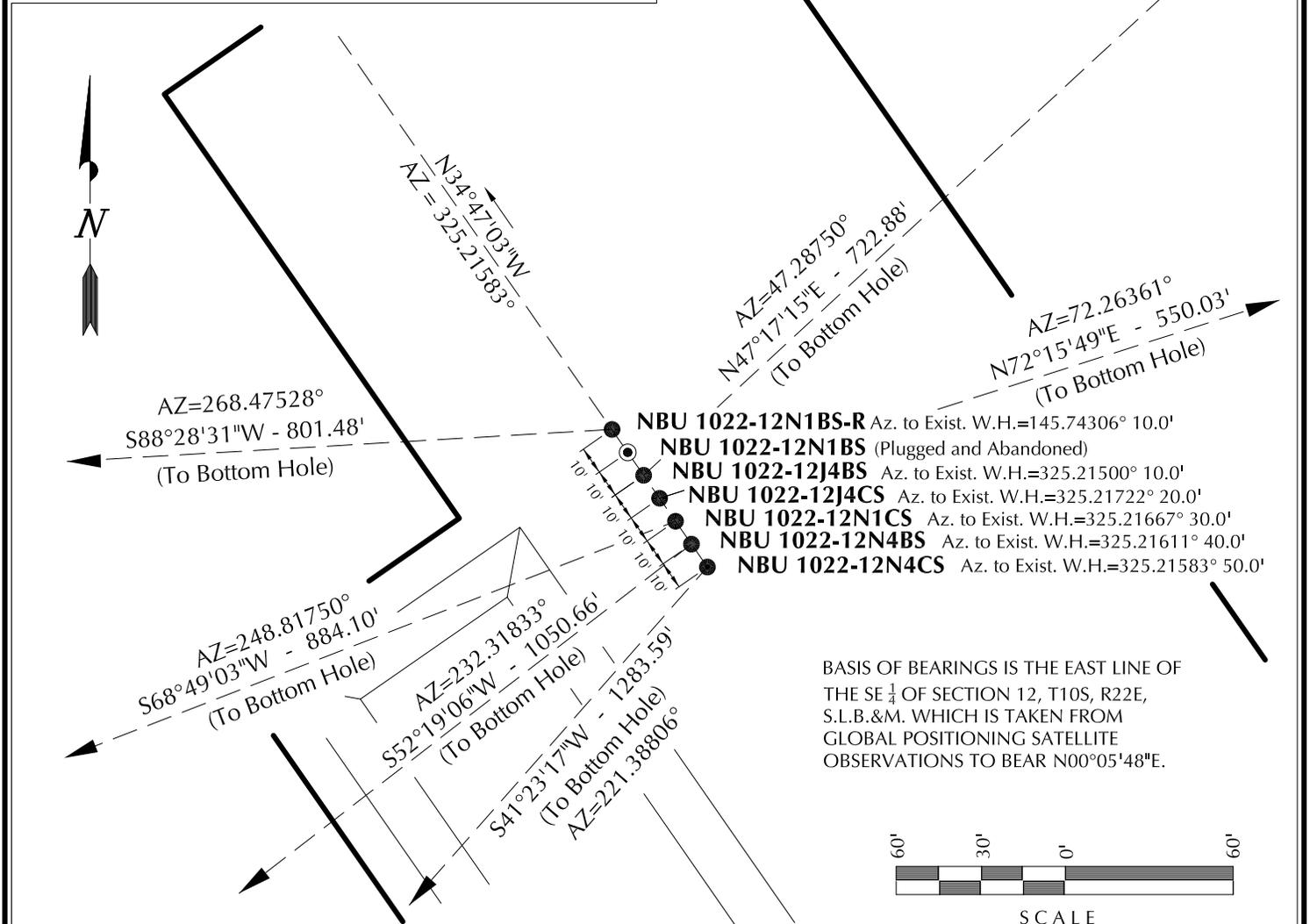
**NBU 1022-12N1BS-R
WELL PLAT**

1242' FSL, 2147' FWL (Bottom Hole)
SE ¼ SW ¼ OF SECTION 12, T10S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH.

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 1022-12N4CS	39°57'34.307"	109°23'13.763"	39°57'34.430"	109°23'11.314"	1216' FSL 2323' FEL	39°57'24.799"	109°23'24.669"	39°57'24.922"	109°23'22.220"	251' FSL 2141' FWL
NBU 1022-12N4BS	39°57'34.388"	109°23'13.836"	39°57'34.511"	109°23'11.387"	1224' FSL 2329' FEL	39°57'28.050"	109°23'24.519"	39°57'28.172"	109°23'22.069"	580' FSL 2150' FWL
NBU 1022-12N1CS	39°57'34.469"	109°23'13.910"	39°57'34.592"	109°23'11.461"	1232' FSL 2335' FEL	39°57'31.320"	109°23'24.497"	39°57'31.443"	109°23'22.047"	911' FSL 2149' FWL
NBU 1022-12J4CS	39°57'34.550"	109°23'13.983"	39°57'34.673"	109°23'11.534"	1240' FSL 2341' FEL	39°57'36.201"	109°23'07.255"	39°57'36.324"	109°23'04.806"	1409' FSL 1817' FEL
NBU 1022-12J4BS	39°57'34.631"	109°23'14.056"	39°57'34.754"	109°23'11.607"	1249' FSL 2346' FEL	39°57'39.472"	109°23'07.231"	39°57'39.594"	109°23'04.782"	1740' FSL 1816' FEL
NBU 1022-12N1BS-R	39°57'34.794"	109°23'14.201"	39°57'34.917"	109°23'11.752"	1265' FSL 2358' FEL	39°57'34.590"	109°23'24.488"	39°57'34.713"	109°23'22.038"	1242' FSL 2147' FWL
NBU 1022-12N1BS	39°57'34.713"	109°23'14.129"	39°57'34.836"	109°23'11.680"	1257' FSL 2352' FEL	39°57'34.590"	109°23'13.500"	39°57'34.713"	109°23'22.038"	1242' FSL 2147' FWL

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
NBU 1022-12N4CS	-963.0'	-848.7'	NBU 1022-12N4BS	-642.2'	-831.5'	NBU 1022-12N1CS	-319.5'	-824.4'	NBU 1022-12J4CS	167.6'	523.9'
NBU 1022-12J4BS	490.3'	531.1'	NBU 1022-12N1BS-R	-21.3'	-801.2'						



Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-120

WELL PAD INTERFERENCE PLAT
WELLS - NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
LOCATED IN SECTION 12, T10S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH.



CONSULTING, LLC
2155 North Main Street
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

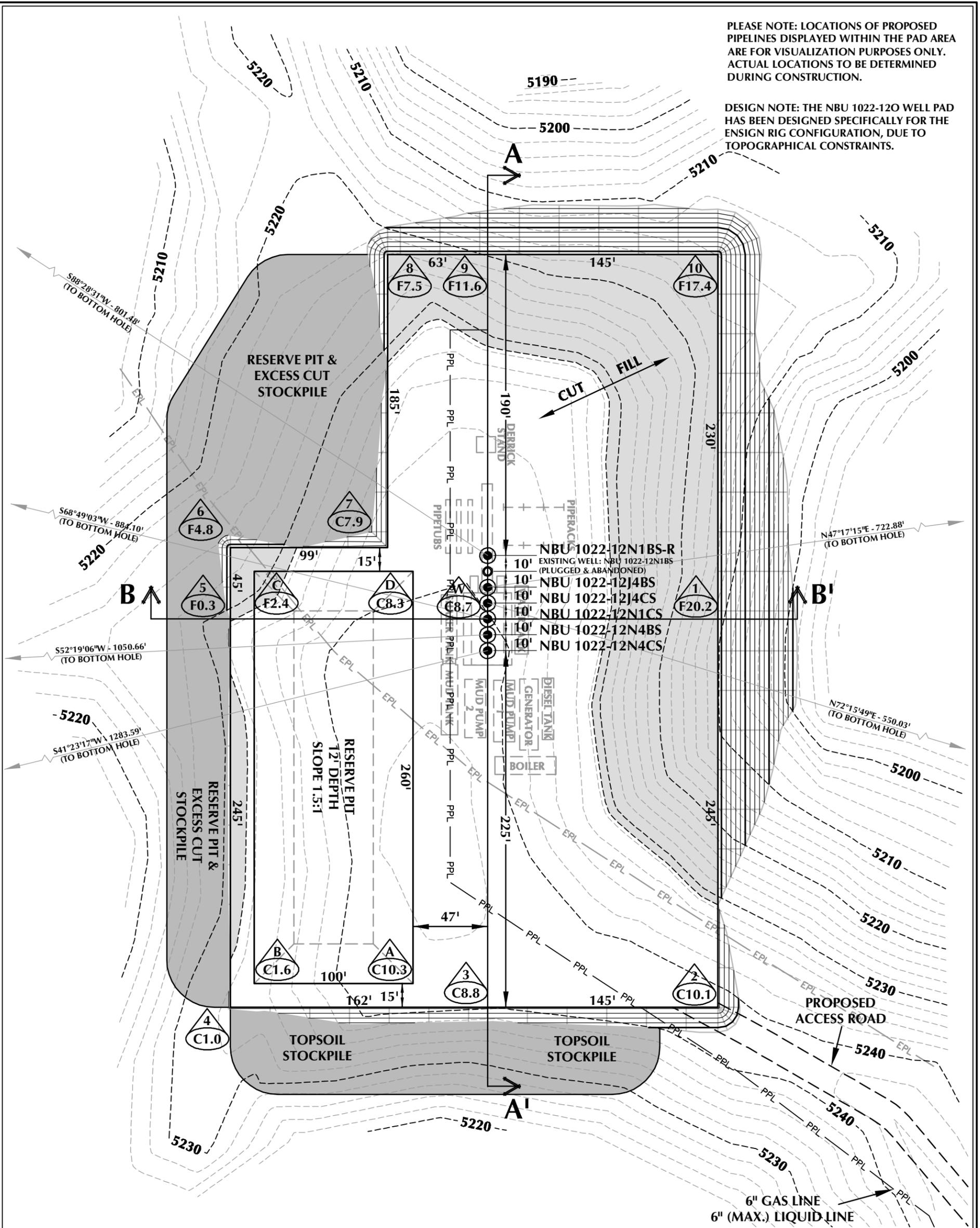
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

DATE SURVEYED: 01-21-11	SURVEYED BY: R.Y.	SHEET NO: 7
DATE DRAWN: 02-03-11	DRAWN BY: E.M.S.	
SCALE: 1" = 60'	Date Last Revised: 6-14-12 J.G.C.	7 OF 18

PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

DESIGN NOTE: THE NBU 1022-120 WELL PAD HAS BEEN DESIGNED SPECIFICALLY FOR THE ENSIGN RIG CONFIGURATION, DUE TO TOPOGRAPHICAL CONSTRAINTS.



WELL PAD - NBU 1022-120 DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5240.1'
 FINISHED GRADE ELEVATION = 5231.4'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.54 ACRES
 TOTAL DAMAGE AREA = 5.84 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-120
 WELL PAD - LOCATION LAYOUT
 NBU 1022-12N4CS, NBU 1022-12N4BS,
 NBU 1022-12N1CS, NBU 1022-12J4CS,
 NBU 1022-12J4BS & NBU 1022-12N1BS-R
 LOCATED IN SECTION 12, T10S, R22E,
 S.L.B.&M., UTAH COUNTY, UTAH



609 CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

WELL PAD QUANTITIES

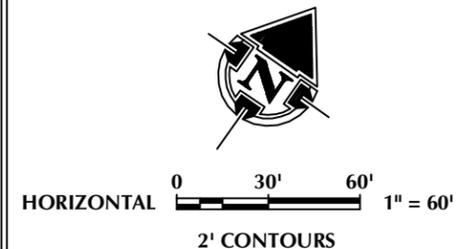
TOTAL CUT FOR WELL PAD = 21,444 C.Y.
 TOTAL FILL FOR WELL PAD = 20,227 C.Y.
 TOPSOIL @ 6" DEPTH = 2,856 C.Y.
 EXCESS MATERIAL = 1,217 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT
 +/- 8,870 C.Y.
 RESERVE PIT CAPACITY (2' OF FREEBOARD)
 +/- 33,770 BARRELS

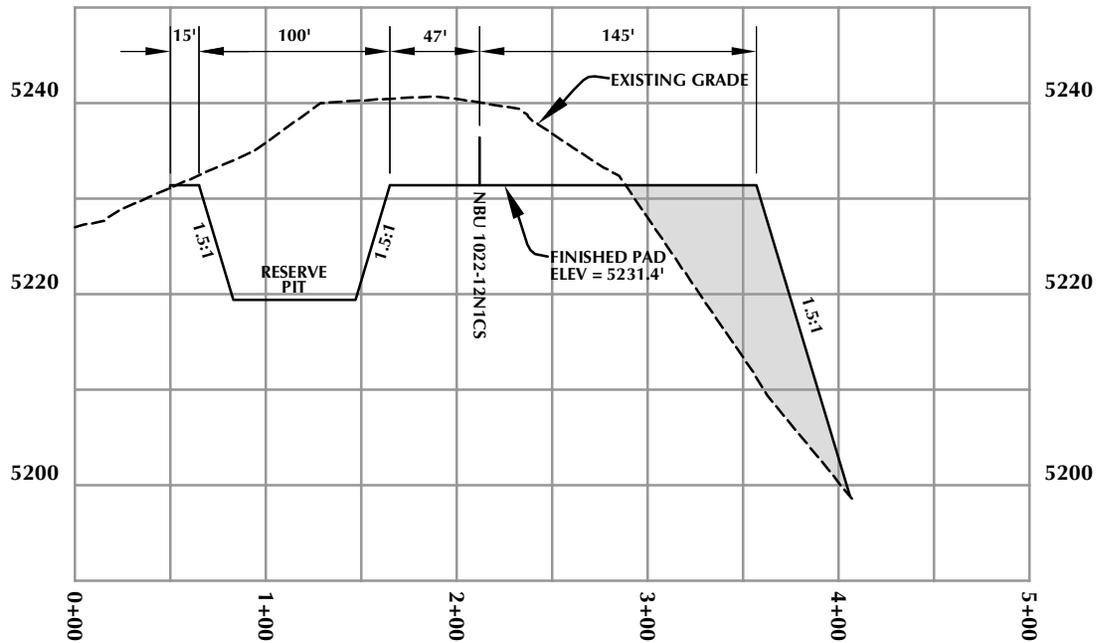
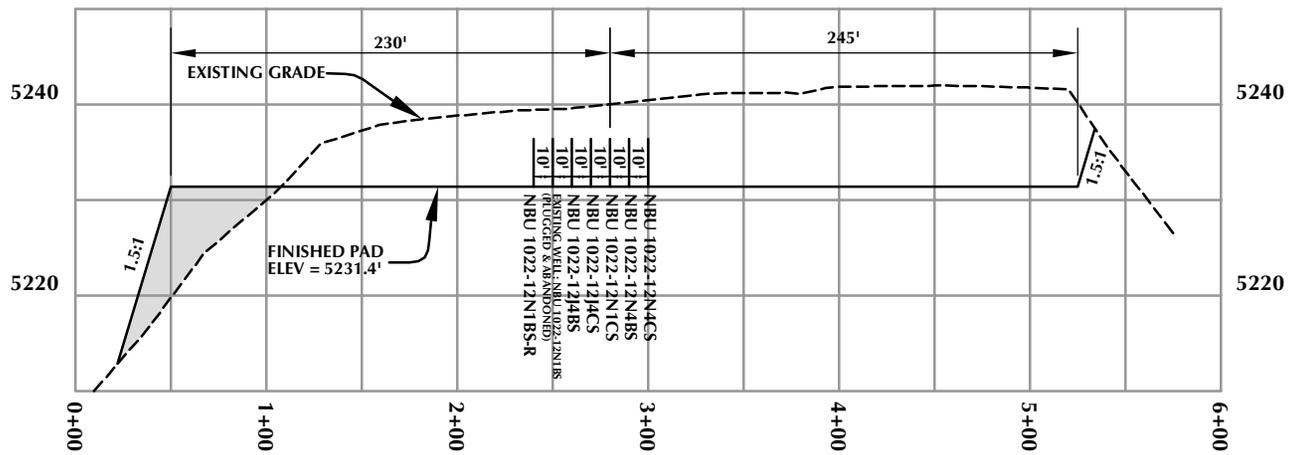
WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PROPOSED PIPELINE
- EXISTING PIPELINE



SCALE: 1"=60' DATE: 3/8/11 SHEET NO: 8 OF 18
 REVISED: DJD 6/15/12

TIMBERLINE ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078
 (435) 789-1365



Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-120

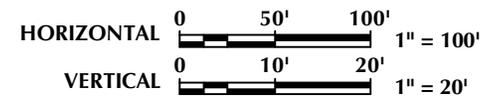
WELL PAD - CROSS SECTIONS
NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
LOCATED IN SECTION 12, T10S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

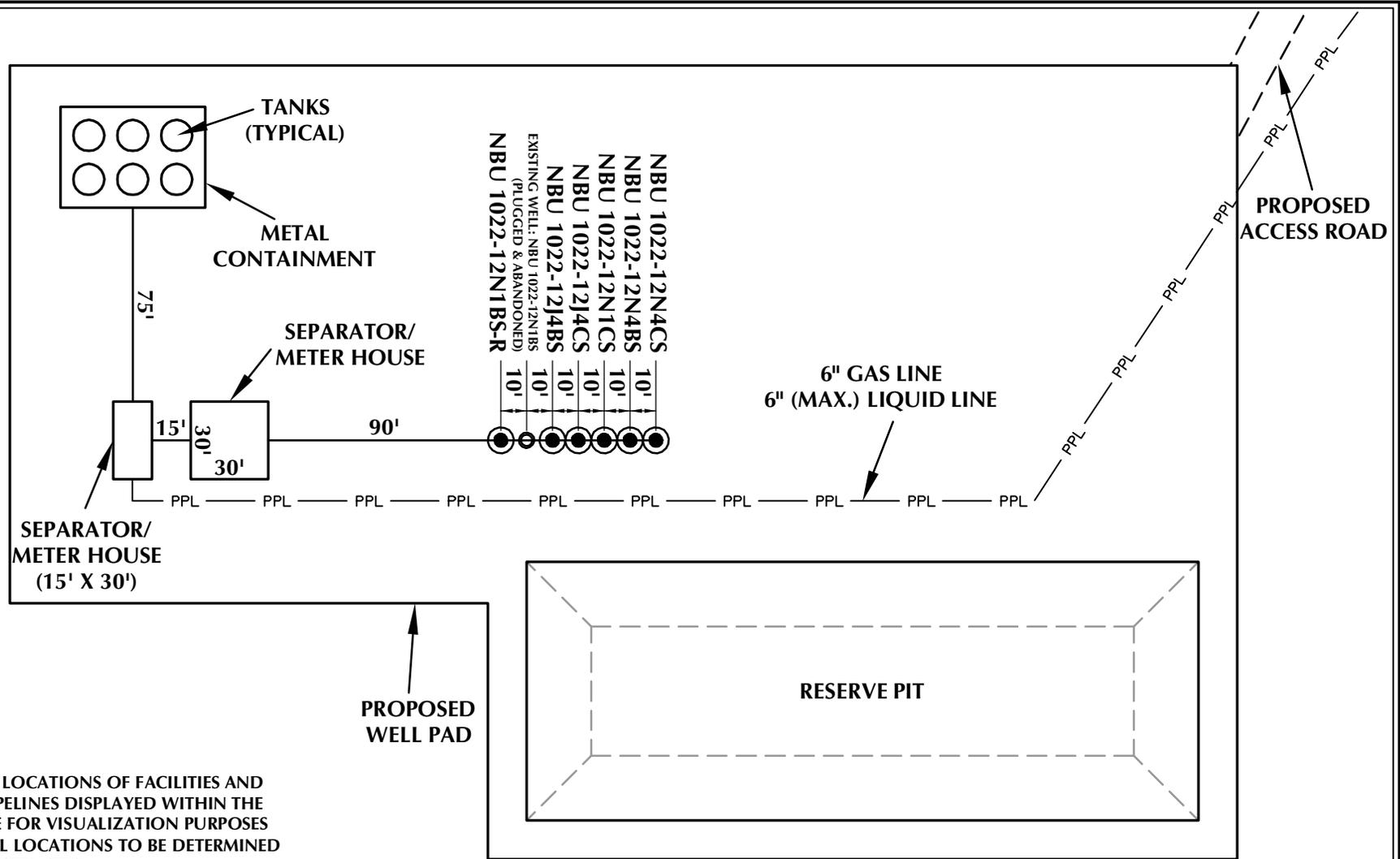
TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365



Scale: 1"=100'	Date: 3/8/11	SHEET NO:
REVISED:	DJD 6/15/12	9 9 OF 18

K:\ANADARKO\2010\10_64_NBU_FOCUS\S1\S1201\NBU\021201\DWG\NBU_1022-120_PAD_CROSS_SECTION_A-A.dwg, 9/15/15 9:28:18 AM, dsh



PLEASE NOTE: LOCATIONS OF FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-120

WELL PAD - FACILITIES DIAGRAM

NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
LOCATED IN SECTION 12, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PPL — PROPOSED PIPELINE
- EPL — EXISTING PIPELINE



HORIZONTAL 1" = 60'

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

Scale: 1"=60' Date: 3/8/11
REVISED: DJD 6/15/12

SHEET NO:
10 10 OF 18

K:\ANADARKO\2010_04_NBU_FOCUS_1022-12\DWG\NBU_1022-120\NBU_1022_120_102101026.dwg, 6/15/2012 9:27:24 AM, dshy

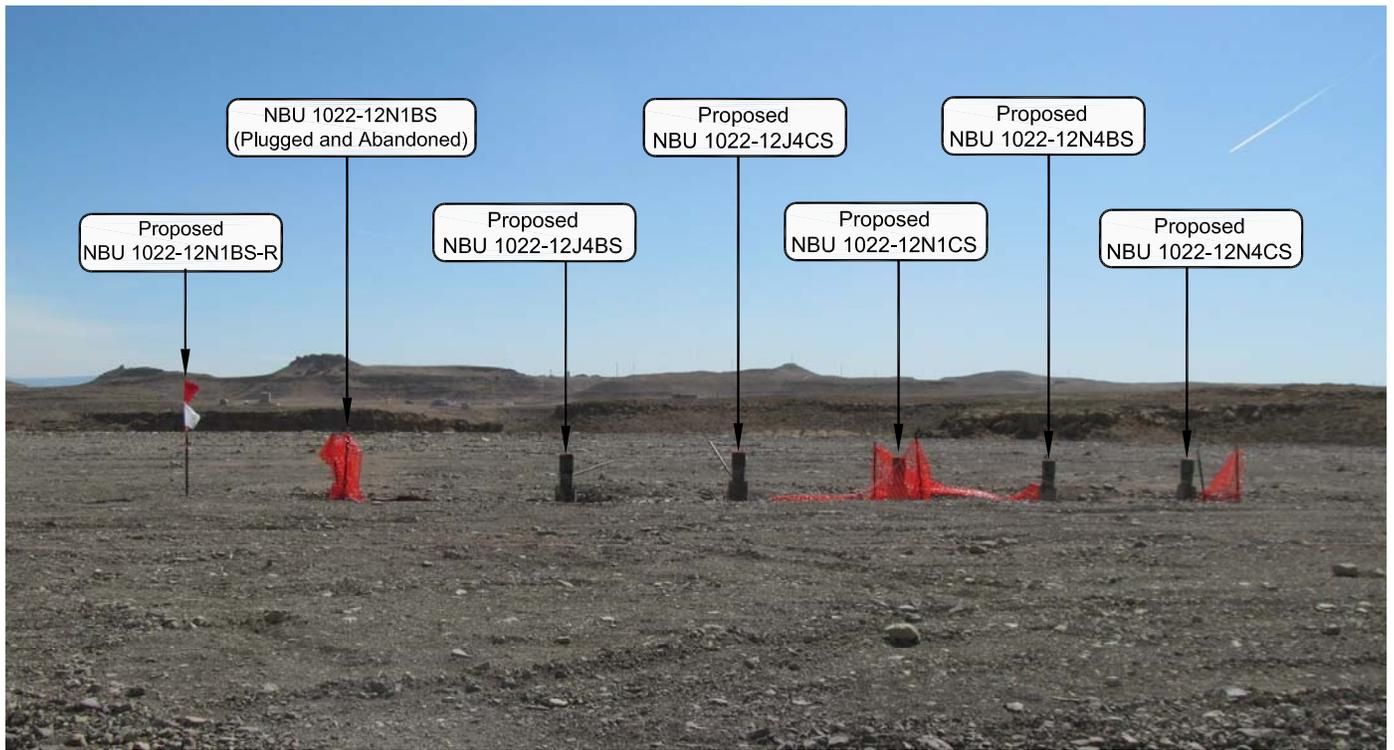


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: WESTERLY

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-12O

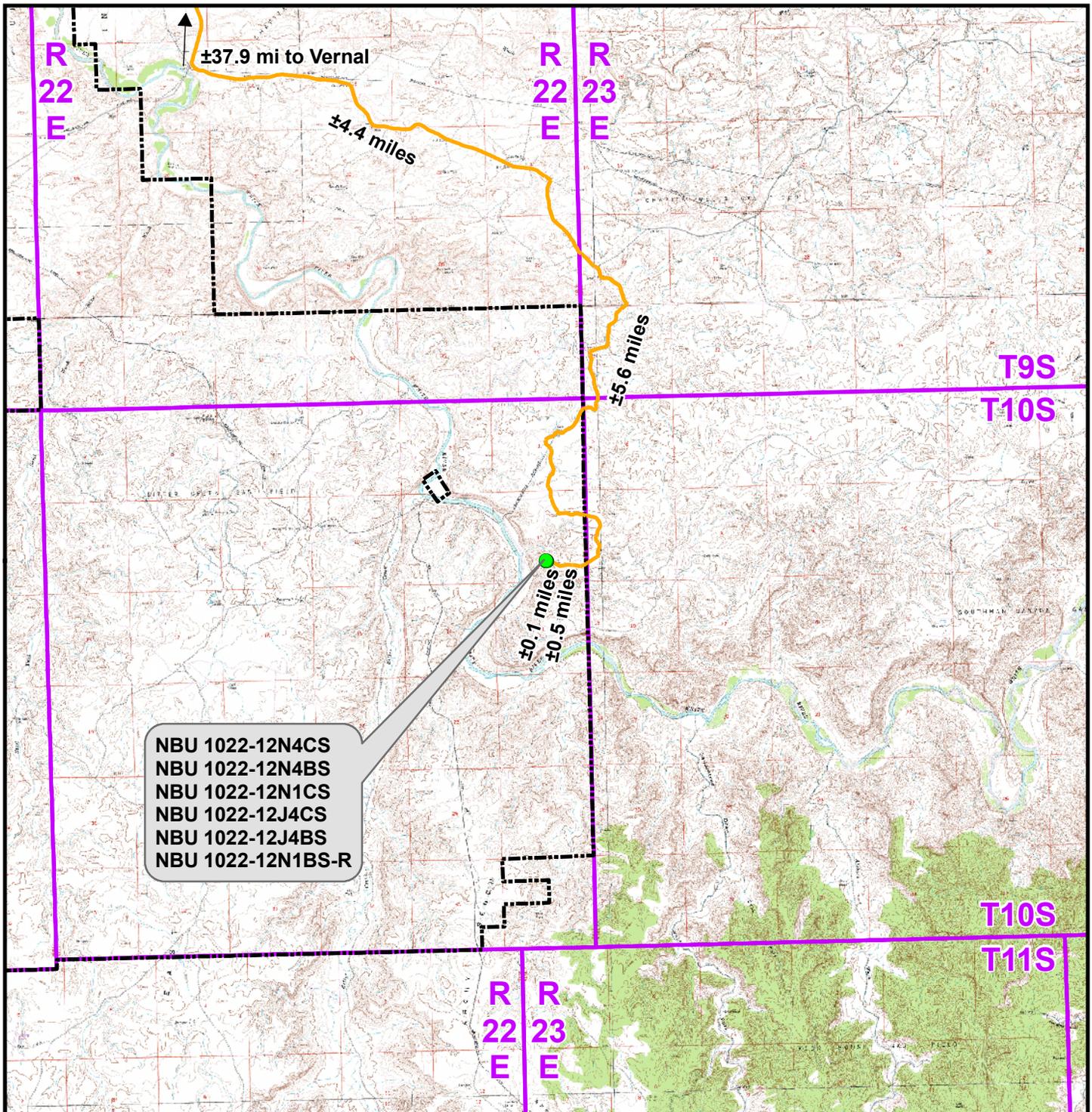
LOCATION PHOTOS
 NBU 1022-12N4CS, NBU 1022-12N4BS,
 NBU 1022-12N1CS, NBU 1022-12J4CS,
 NBU 1022-12J4BS & NBU 1022-12N1BS-R
 LOCATED IN SECTION 12, T10S, R22E,
 S.L.B.&M., Uintah County, Utah.



CONSULTING, LLC
 2155 North Main Street
 Sheridan WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

TIMBERLINE (435) 789-1365
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 01-21-11	PHOTOS TAKEN BY: R.Y.	SHEET NO: 11
DATE DRAWN: 02-03-11	DRAWN BY: E.M.S.	
Date Last Revised: 6-14-12 J.G.C.		11 OF 18



NBU 1022-12N4CS
 NBU 1022-12N4BS
 NBU 1022-12N1CS
 NBU 1022-12J4CS
 NBU 1022-12J4BS
 NBU 1022-12N1BS-R

Legend

- Proposed Well Location
- Natural Buttes Unit Boundary
- Access Route - Proposed

Distance From Well Pad - NBU 1022-12O To Unit Boundary: ±2,323ft

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12O

TOPO A

NBU 1022-12N4CS, NBU 1022-12N4BS,
 NBU 1022-12N1CS, NBU 1022-12J4CS,
 NBU 1022-12J4BS & NBU 1022-12N1BS-R
 LOCATED IN SECTION 12, T10S, R22E
 S.L.B.&M., UTAH COUNTY, UTAH

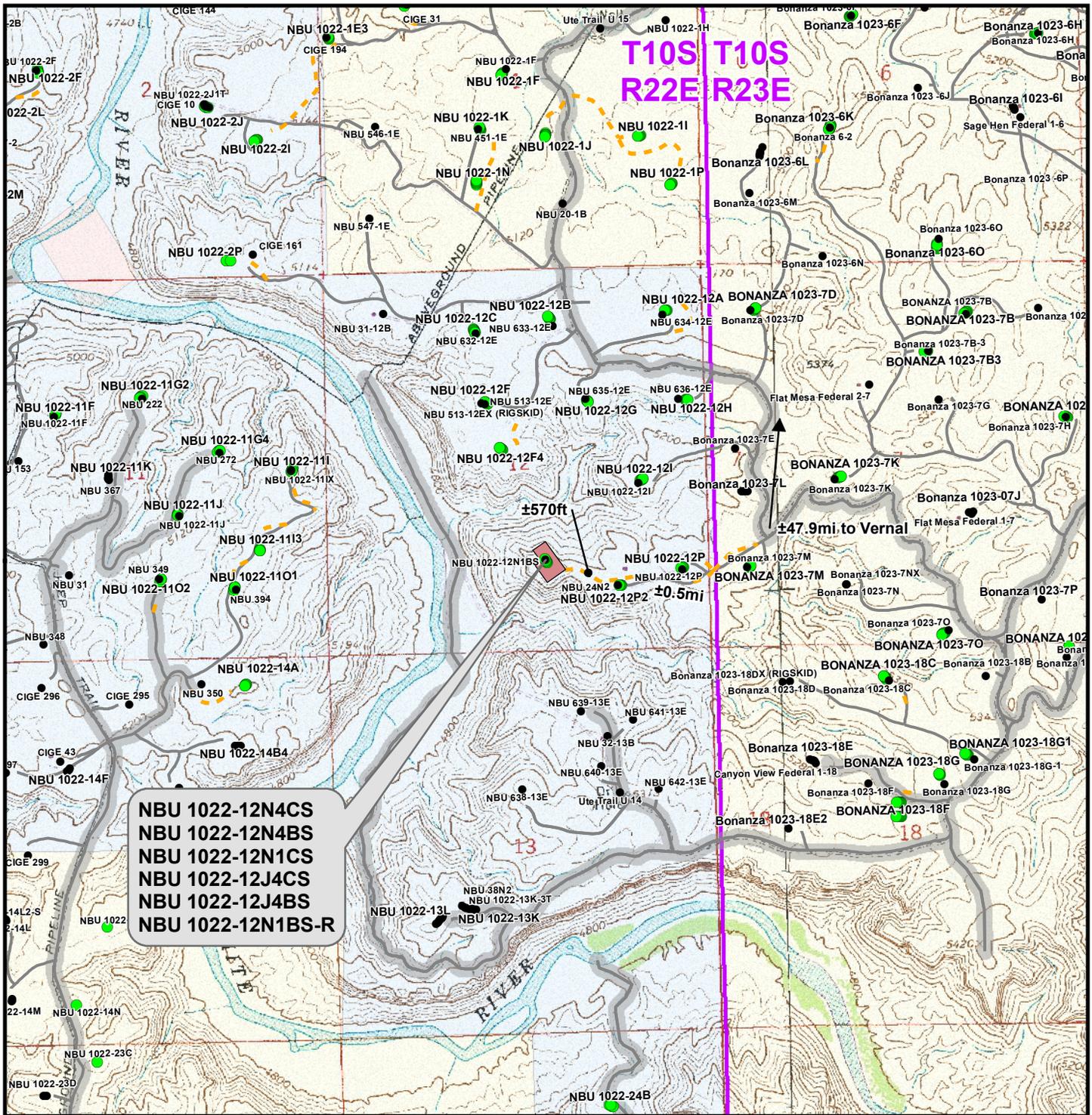


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Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	12
Revised: TL	Date: 15 June 2012	

12 of 18



NBU 1022-12N4CS
NBU 1022-12N4BS
NBU 1022-12N1CS
NBU 1022-12J4CS
NBU 1022-12J4BS
NBU 1022-12N1BS-R

Legend		Total Proposed Road Length: ±570ft	
● Well - Proposed	■ Well Pad	--- Road - Proposed	▬ County Road
● Well - Existing	---	---	▬ Bureau of Land Management
			▬ State
			▬ Indian Reservation
			▬ Private

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12O

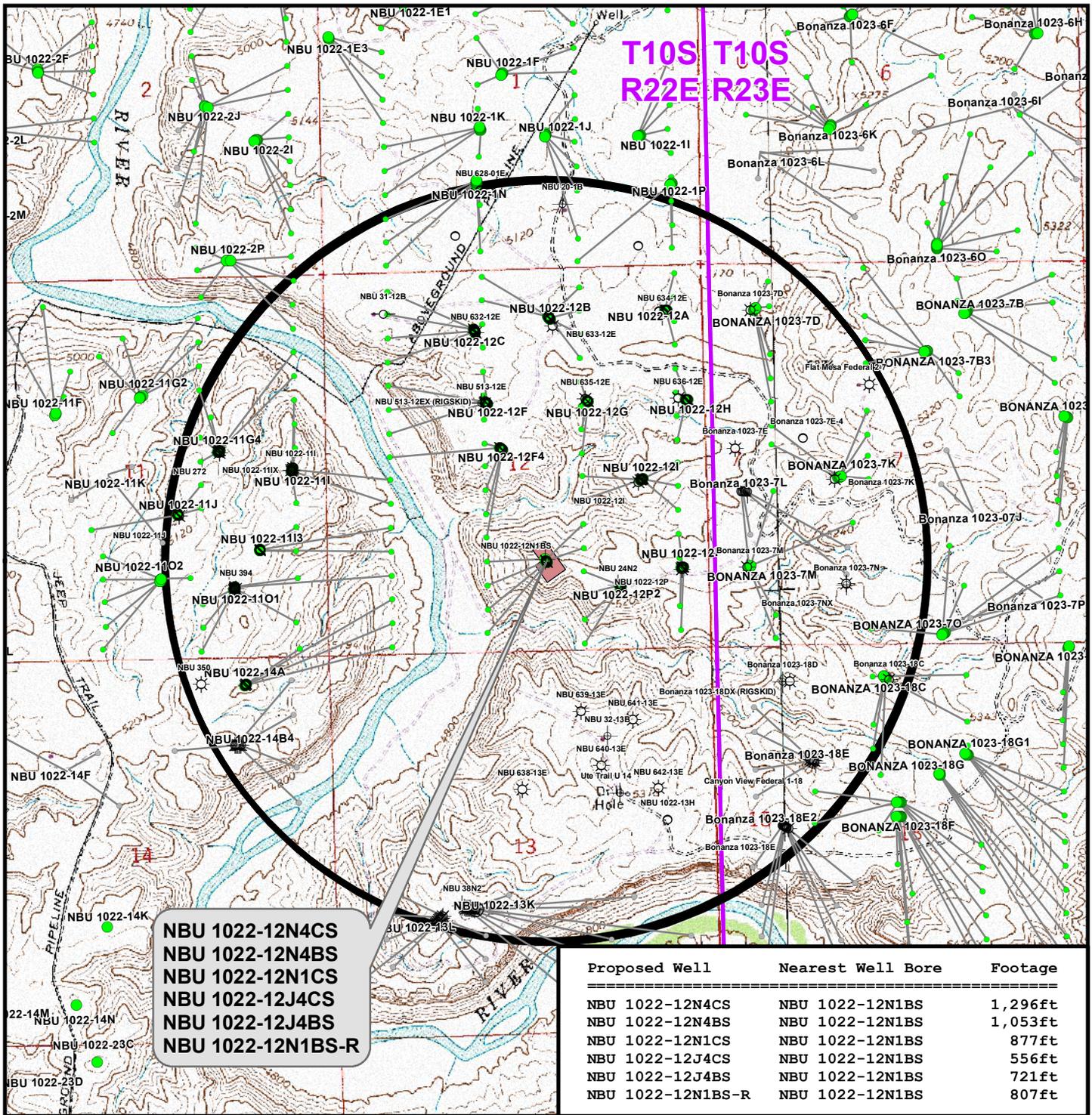
TOPO B

NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
 LOCATED IN SECTION 12, T10S, R22E
 S.L.B.&M., UINTAH COUNTY, UTAH

CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	13
Revised: TL	Date: 15 June 2012	



Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

Legend

- Well - Proposed (Green dot)
- Well Path (Grey line)
- Bottom Hole - Proposed (Green dot)
- Bottom Hole - Existing (Grey dot)
- Well Pad (Red square)
- Well - 1 Mile Radius (Black circle)
- Producing (Sun symbol)
- Spudded (Smiley face symbol)
- APD Approved (Circle with X symbol)
- Preliminary Location (Circle with dot symbol)
- Deferred (Circle with plus symbol)
- Cancelled (X symbol)
- Temporarily Abandoned (Circle with slash symbol)
- Active Injector (Star symbol)
- Location Abandoned (Star with X symbol)
- Plugged & Abandoned (Star with dot symbol)
- Shut-In (Circle with dot symbol)

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

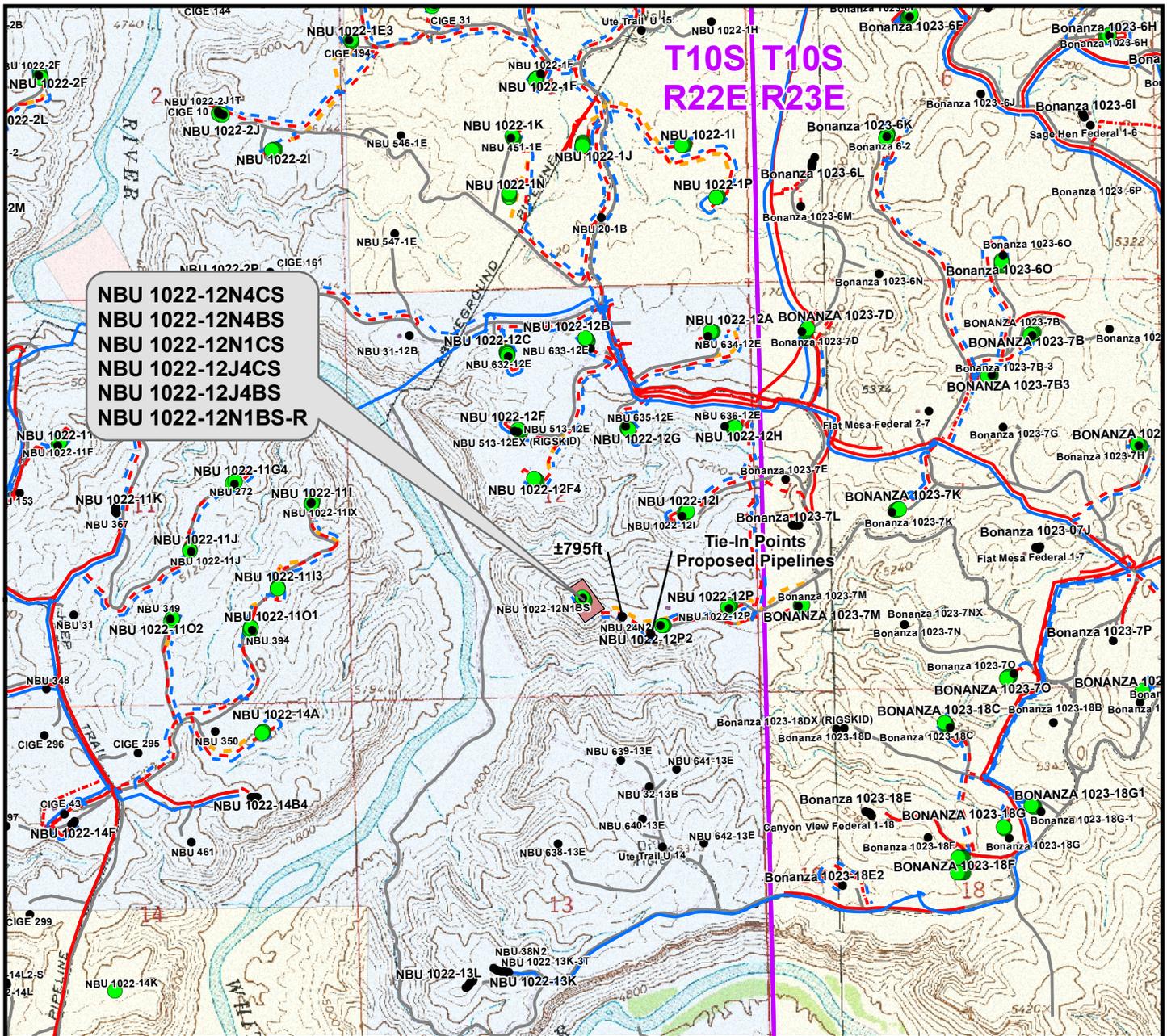
WELL PAD - NBU 1022-12O

TOPO C
NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
LOCATED IN SECTION 12, T10S, R22E
S.L.B.&M., UTAH COUNTY, UTAH

609 CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

Scale: 1" = 2,000ft | NAD83 USP Central | Sheet No: 14 of 18

Drawn: TL | Date: 8 Mar 2011
Revised: TL | Date: 15 June 2012



**NBU 1022-12N4CS
NBU 1022-12N4BS
NBU 1022-12N1CS
NBU 1022-12J4CS
NBU 1022-12J4BS
NBU 1022-12N1BS-R**

**±795ft
Tie-In Points
Proposed Pipelines**

Proposed Liquid Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±505ft
Proposed 6" (Max.) (Edge of Pad to 12P2 Intersection)	±795ft
TOTAL PROPOSED LIQUID PIPELINE =	±1,300ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±505ft
Proposed 6" (Edge of Pad to 12P2 Intersection)	±795ft
TOTAL PROPOSED GAS PIPELINE =	±1,300ft

Legend

- Well - Proposed
- Well - Existing
- Well Pad
- - - Gas Pipeline - Proposed
- - - Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- - - Liquid Pipeline - Proposed
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12O

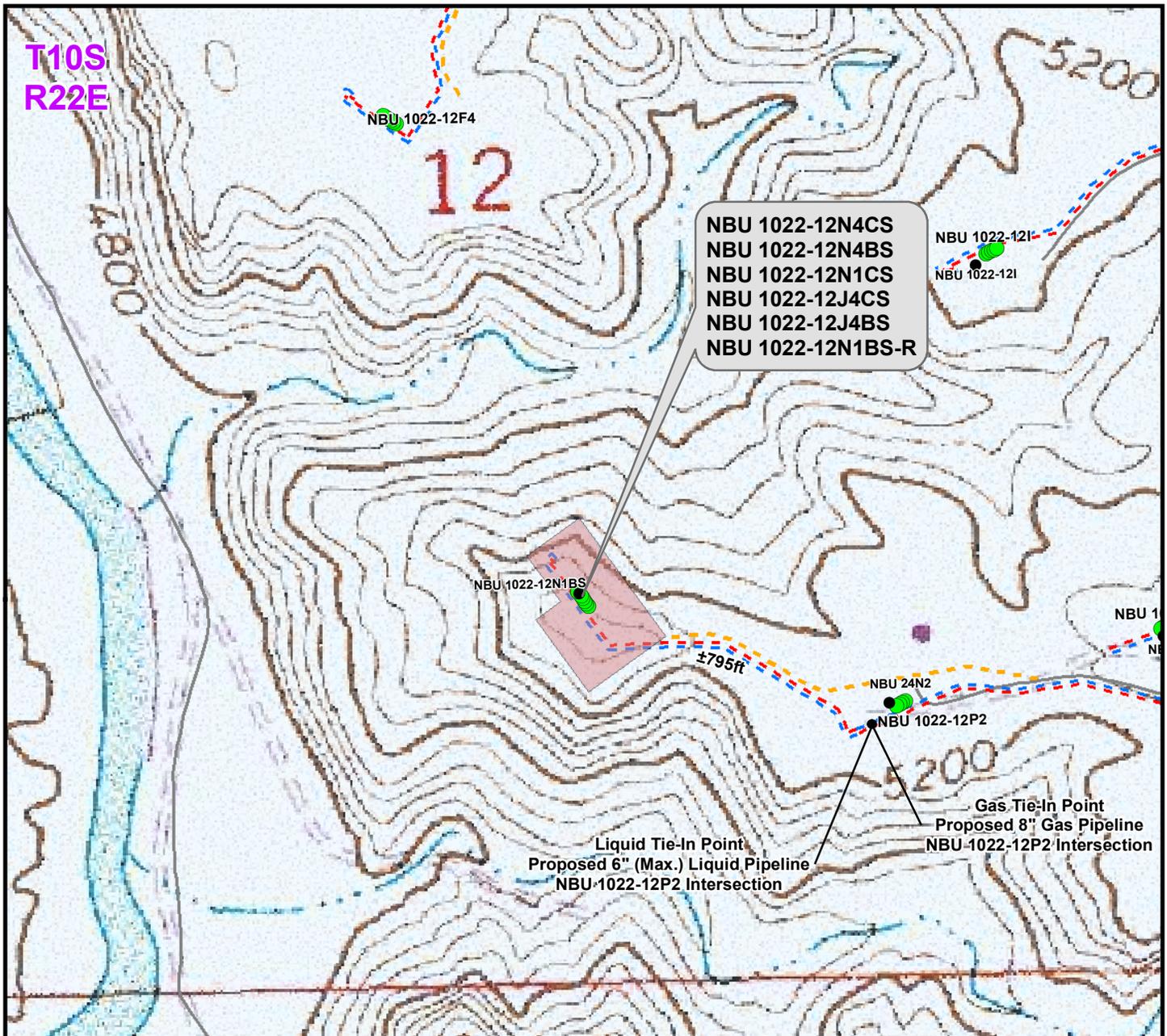
TOPO D
NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
LOCATED IN SECTION 12, T10S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH

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CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No: 15 15 of 18
Drawn: TL	Date: 8 Mar 2011	
Revised: TL	Date: 15 June 2012	



Proposed Liquid Pipeline	Length	Proposed Gas Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±505ft	Proposed 6" (Meter House to Edge of Pad)	±505ft
Proposed 6" (Max.) (Edge of Pad to 12P2 Intersection)	±795ft	Proposed 6" (Edge of Pad to 12P2 Intersection)	±795ft
TOTAL PROPOSED LIQUID PIPELINE =	±1,300ft	TOTAL PROPOSED GAS PIPELINE =	±1,300ft

Legend

- Well - Proposed
- Well - Existing
- Well Pad
- - - Gas Pipeline - Proposed
- - - Gas Pipeline - To Be Upgraded
- - - Gas Pipeline - Existing
- - - Liquid Pipeline - Proposed
- - - Liquid Pipeline - Existing
- - - Road - Proposed
- - - Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

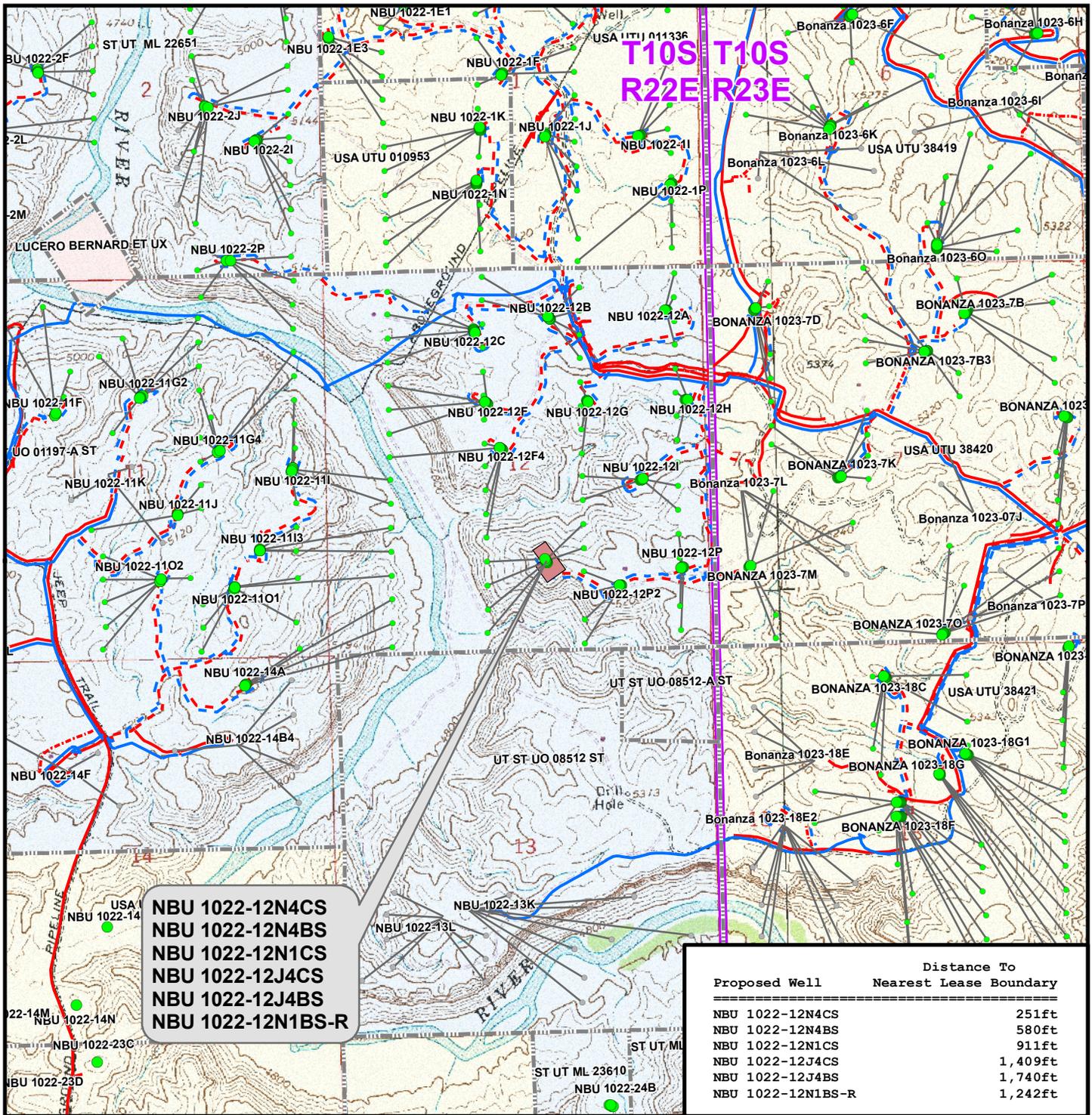
WELL PAD - NBU 1022-12O

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 1022-12N4CS, NBU 1022-12N4BS,
 NBU 1022-12N1CS, NBU 1022-12J4CS,
 NBU 1022-12J4BS & NBU 1022-12N1BS-R
 LOCATED IN SECTION 12, T10S, R22E
 S.L.B.&M., UINTAH COUNTY, UTAH

609
CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone (307) 674-0609
 Fax (307) 674-0182



Scale: 1" = 500ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	16
Revised: TL	Date: 15 June 2012	



Legend

- Well - Proposed
- Bottom Hole - Proposed
- Bottom Hole - Existing
- Well Path
- Well Pad
- ▭ Lease Boundary
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12O

TOPO E
NBU 1022-12N4CS, NBU 1022-12N4BS,
NBU 1022-12N1CS, NBU 1022-12J4CS,
NBU 1022-12J4BS & NBU 1022-12N1BS-R
LOCATED IN SECTION 12, T10S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH



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2155 North Main Street
Sheridan, WY 82801
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Fax (307) 674-0182

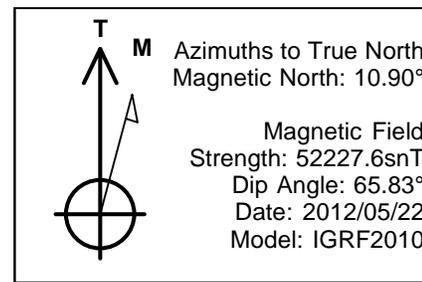


Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	17
Revised: TL	Date: 15 June 2012	

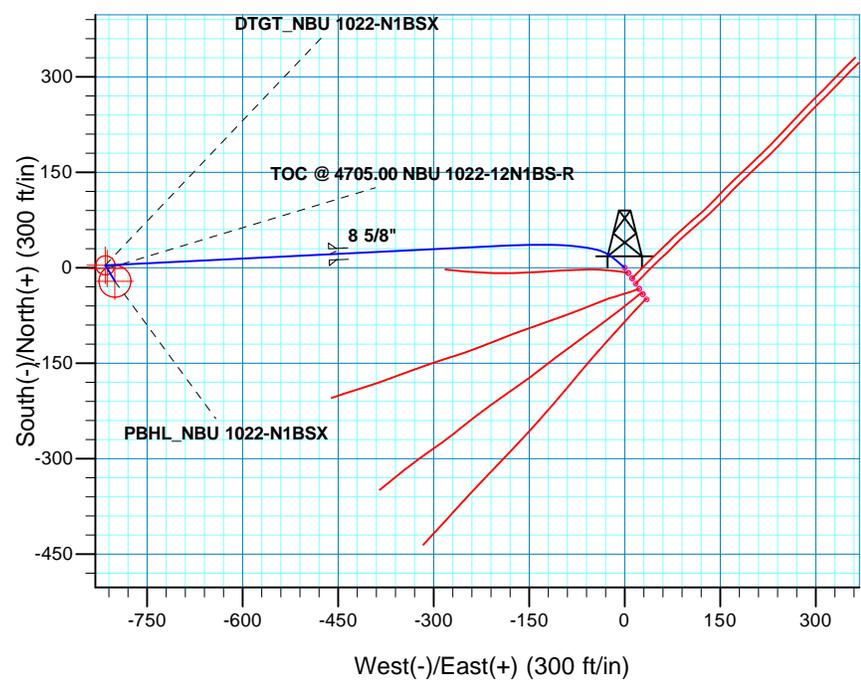
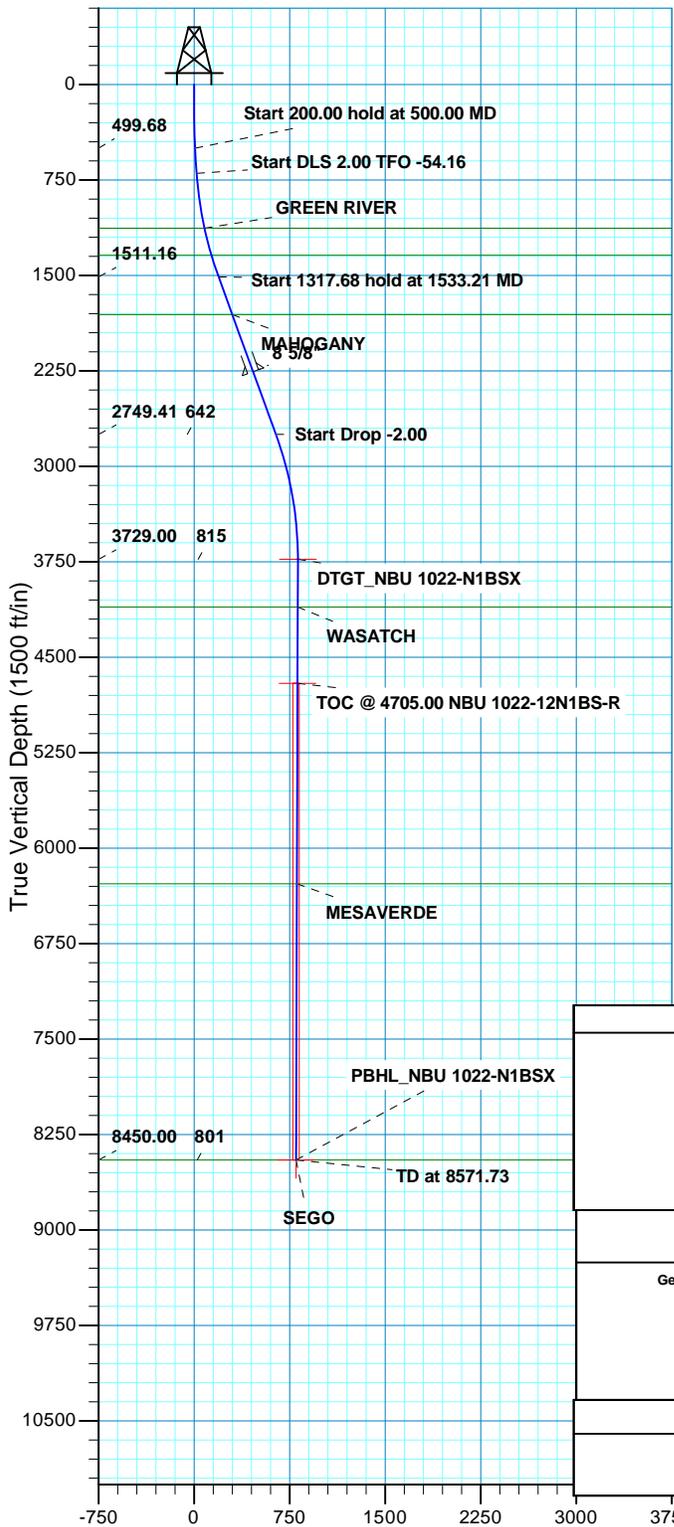
Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 1022-120
WELLS – NBU 1022-12N4CS, NBU 1022-12N4BS, NBU 1022-12N1CS,
NBU 1022-12J4CS, NBU 1022-12J4BS & NBU 1022-12N1BS-R
Section 12, T10S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 14.4 miles to the intersection of the Fidlar Road (County B Road 3410) which road intersection is approximately 400 feet northeast of the Mountain Fuel Bridge at the White River. Exit left and proceed in a southeasterly direction along the Fidlar Road approximately 4.4 miles to the intersection of the Seven Sisters Road (County B Road 3420). Exit right and proceed in a southeasterly, then southerly direction along the Seven Sisters Road approximately 5.6 miles to a service road to the southwest. Exit right and proceed in a southwesterly, then westerly direction along the service road approximately 0.5 miles to the proposed access road. Follow road flags in a westerly direction approximately 570 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 48.5 miles in a southerly direction.



WELL DETAILS: NBU 1022-12N1BS-R								
GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)								
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
0.00	0.00	14515458.78	2092539.10	39.959700	-109.386599			
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
DTGT	3729.00	3.88	-815.50	14515447.91	2091723.67	39.959711	-109.389509	Circle (Radius: 15.00)
	- plan hits target center							
TOC	4705.00	-1.03	-812.55	14515443.05	2091726.70	39.959697	-109.389498	Point
	- plan hits target center							
PBHL	8450.00	-21.12	-800.50	14515423.19	2091739.12	39.959642	-109.389455	Circle (Radius: 25.00)
	- plan hits target center							



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
500.00	5.00	310.00	499.68	7.01	-8.35	2.00	310.00	8.16	
700.00	5.00	310.00	698.92	18.21	-21.70	0.00	0.00	21.22	
1533.21	20.00	267.17	1511.16	34.64	-193.01	2.00	-54.16	192.03	
2850.88	20.00	267.17	2749.41	12.40	-643.03	0.00	0.00	642.47	DTGT_NBU 1022-N1BSX
3850.64	0.00	0.00	3729.00	3.88	-815.50	2.00	180.00	815.11	
3970.09	0.36	149.03	3848.45	3.56	-815.31	0.30	149.03	814.93	
8571.73	0.36	149.03	8450.00	-21.12	-800.50	0.00	0.00	800.78	PBHL_NBU 1022-N1BSX

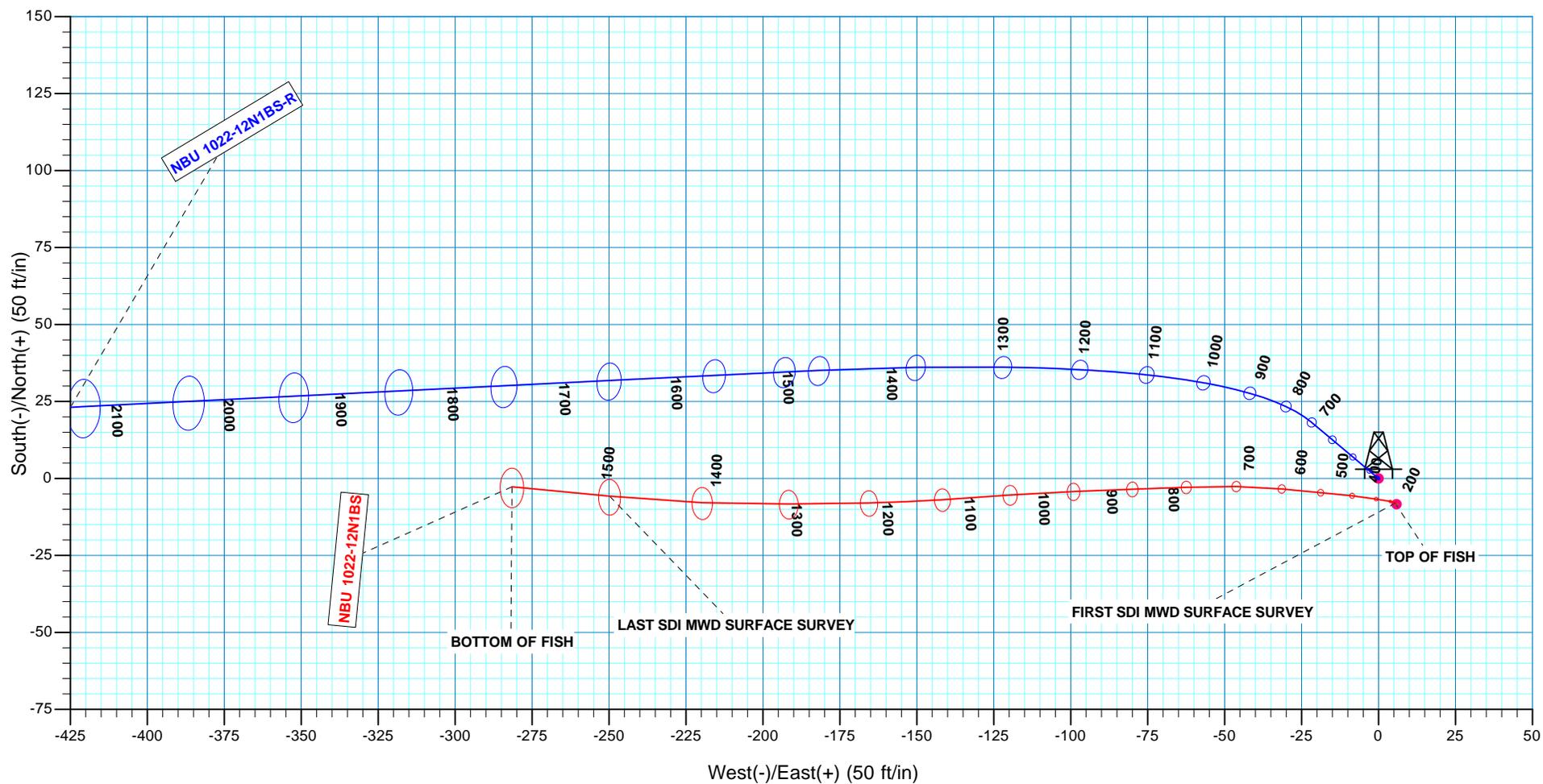
PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N		
Geodetic System:	Universal Transverse Mercator (US Survey Feet)	
Datum:	NAD 1927 (NADCON CONUS)	
Ellipsoid:	Clarke 1866	
Zone:	Zone 12N (114 W to 108 W)	
Location:	SECTION 12 T10S R22E	
System Datum:	Mean Sea Level	

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1129.00	1135.08	GREEN RIVER
1341.00	1354.00	BIRDSNEST
1808.00	1849.08	MAHOGANY
4105.00	4226.65	WASATCH
6280.00	6401.69	MESAVERDE
8450.00	8571.73	SEGO

CASING DETAILS			
TVD	MD	Name	Size
2258.00	2327.95	8 5/8"	8.625

RECEIVED

PLAN #1 SURFACE





Scientific Drilling

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-12O PAD

NBU 1022-12N1BS-R

OH

Plan: PLAN #1 SURFACE

Standard Planning Report

22 May, 2012





Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Site:	NBU 1022-12O PAD	North Reference:	True
Well:	NBU 1022-12N1BS-R	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 SURFACE		

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 1022-12O PAD, SECTION 12 T10S R22E				
Site Position:	Northing:	14,515,442.24 usft	Latitude:	39.959654	
From:	Lat/Long	Easting:	2,092,551.18 usft	Longitude:	-109.386557
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.04 °

Well	NBU 1022-12N1BS-R, 1257 FSL 2352 FEL					
Well Position	+N/-S	16.76 ft	Northing:	14,515,458.79 usft	Latitude:	39.959700
	+E/-W	-11.78 ft	Easting:	2,092,539.10 usft	Longitude:	-109.386599
Position Uncertainty	0.00 ft	Wellhead Elevation:		Ground Level:	5,231.00 ft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/05/22	10.90	65.83	52,228

Design	PLAN #1 SURFACE			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	268.49

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	5.00	310.00	499.68	7.01	-8.35	2.00	2.00	0.00	310.00	
700.00	5.00	310.00	698.92	18.21	-21.70	0.00	0.00	0.00	0.00	
1,533.21	20.00	267.17	1,511.16	34.64	-193.01	2.00	1.80	-5.14	-54.16	
2,850.88	20.00	267.17	2,749.41	12.40	-643.03	0.00	0.00	0.00	0.00	
3,850.64	0.00	0.00	3,729.00	3.88	-815.50	2.00	-2.00	0.00	180.00	DTGT_NBU 1022-N1I
3,970.09	0.36	149.03	3,848.45	3.56	-815.31	0.30	0.30	124.77	149.03	
8,571.73	0.36	149.03	8,450.00	-21.12	-800.50	0.00	0.00	0.00	0.00	PBHL_NBU 1022-N1I



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Site:	NBU 1022-12O PAD	North Reference:	True
Well:	NBU 1022-12N1BS-R	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 SURFACE		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
300.00	1.00	310.00	300.00	0.28	-0.33	0.33	2.00	2.00	0.00	
400.00	3.00	310.00	399.93	2.52	-3.01	2.94	2.00	2.00	0.00	
500.00	5.00	310.00	499.68	7.01	-8.35	8.16	2.00	2.00	0.00	
Start 200.00 hold at 500.00 MD										
600.00	5.00	310.00	599.30	12.61	-15.03	14.69	0.00	0.00	0.00	
700.00	5.00	310.00	698.92	18.21	-21.70	21.22	0.00	0.00	0.00	
Start DLS 2.00 TFO -54.16										
800.00	6.38	295.25	798.43	23.38	-30.07	29.44	2.00	1.38	-14.75	
900.00	8.02	286.11	897.64	27.69	-41.80	41.06	2.00	1.64	-9.15	
1,000.00	9.80	280.15	996.43	31.13	-56.89	56.05	2.00	1.78	-5.96	
1,100.00	11.65	276.04	1,094.68	33.69	-75.31	74.39	2.00	1.85	-4.11	
1,135.08	12.31	274.89	1,129.00	34.38	-82.56	81.62	2.00	1.88	-3.28	
GREEN RIVER										
1,200.00	13.54	273.05	1,192.27	35.37	-97.04	96.08	2.00	1.90	-2.83	
1,300.00	15.46	270.78	1,289.08	36.18	-122.07	121.07	2.00	1.92	-2.26	
1,354.00	16.50	269.78	1,341.00	36.25	-136.93	135.93	2.00	1.93	-1.87	
BIRDSNEST										
1,400.00	17.40	269.01	1,385.00	36.10	-150.34	149.34	2.00	1.94	-1.66	
1,500.00	19.35	267.59	1,479.90	35.15	-181.84	180.85	2.00	1.95	-1.43	
1,533.21	20.00	267.17	1,511.16	34.64	-193.01	192.03	2.00	1.96	-1.25	
Start 1317.68 hold at 1533.21 MD										
1,600.00	20.00	267.17	1,573.93	33.51	-215.82	214.86	0.00	0.00	0.00	
1,700.00	20.00	267.17	1,667.90	31.82	-249.97	249.05	0.00	0.00	0.00	
1,800.00	20.00	267.17	1,761.88	30.13	-284.12	283.23	0.00	0.00	0.00	
1,849.08	20.00	267.17	1,808.00	29.31	-300.89	300.01	0.00	0.00	0.00	
MAHOGAN Y										
1,900.00	20.00	267.17	1,855.85	28.45	-318.28	317.42	0.00	0.00	0.00	
2,000.00	20.00	267.17	1,949.82	26.76	-352.43	351.60	0.00	0.00	0.00	
2,100.00	20.00	267.17	2,043.79	25.07	-386.58	385.79	0.00	0.00	0.00	
2,200.00	20.00	267.17	2,137.76	23.39	-420.73	419.97	0.00	0.00	0.00	
2,300.00	20.00	267.17	2,231.74	21.70	-454.89	454.16	0.00	0.00	0.00	
2,327.95	20.00	267.17	2,258.00	21.23	-464.43	463.71	0.00	0.00	0.00	
8 5/8"										
2,400.00	20.00	267.17	2,325.71	20.01	-489.04	488.34	0.00	0.00	0.00	
2,500.00	20.00	267.17	2,419.68	18.32	-523.19	522.53	0.00	0.00	0.00	
2,600.00	20.00	267.17	2,513.65	16.64	-557.34	556.71	0.00	0.00	0.00	
2,700.00	20.00	267.17	2,607.63	14.95	-591.50	590.90	0.00	0.00	0.00	
2,800.00	20.00	267.17	2,701.60	13.26	-625.65	625.08	0.00	0.00	0.00	
2,850.88	20.00	267.17	2,749.41	12.40	-643.03	642.47	0.00	0.00	0.00	
Start Drop -2.00										
2,900.00	19.01	267.17	2,795.71	11.59	-659.40	658.87	2.00	-2.00	0.00	
3,000.00	17.01	267.17	2,890.81	10.07	-690.29	689.78	2.00	-2.00	0.00	
3,100.00	15.01	267.17	2,986.92	8.71	-717.84	717.36	2.00	-2.00	0.00	
3,200.00	13.01	267.17	3,083.94	7.51	-742.02	741.57	2.00	-2.00	0.00	
3,300.00	11.01	267.17	3,181.75	6.48	-762.81	762.37	2.00	-2.00	0.00	
3,400.00	9.01	267.17	3,280.22	5.63	-780.17	779.75	2.00	-2.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Site:	NBU 1022-12O PAD	North Reference:	True
Well:	NBU 1022-12N1BS-R	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 SURFACE		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,500.00	7.01	267.17	3,379.24	4.94	-794.09	793.69	2.00	-2.00	0.00	
3,600.00	5.01	267.17	3,478.68	4.42	-804.56	804.16	2.00	-2.00	0.00	
3,700.00	3.01	267.17	3,578.43	4.08	-811.55	811.16	2.00	-2.00	0.00	
3,800.00	1.01	267.17	3,678.36	3.90	-815.05	814.67	2.00	-2.00	0.00	
3,850.64	0.00	0.00	3,729.00	3.88	-815.50	815.11	2.00	-2.00	0.00	
Start DLS 0.30 TFO 149.03 - DTGT_NBU 1022-N1BSX										
3,900.00	0.15	149.03	3,778.36	3.83	-815.47	815.08	0.30	0.30	0.00	
3,970.09	0.36	149.03	3,848.45	3.56	-815.31	814.93	0.30	0.30	0.00	
Start 4601.64 hold at 3970.09 MD										
4,000.00	0.36	149.03	3,878.36	3.40	-815.21	814.84	0.00	0.00	0.00	
4,100.00	0.36	149.03	3,978.36	2.86	-814.89	814.53	0.00	0.00	0.00	
4,200.00	0.36	149.03	4,078.36	2.33	-814.57	814.22	0.00	0.00	0.00	
4,226.65	0.36	149.03	4,105.00	2.18	-814.48	814.14	0.00	0.00	0.00	
WASATCH										
4,300.00	0.36	149.03	4,178.35	1.79	-814.25	813.92	0.00	0.00	0.00	
4,400.00	0.36	149.03	4,278.35	1.25	-813.92	813.61	0.00	0.00	0.00	
4,500.00	0.36	149.03	4,378.35	0.72	-813.60	813.30	0.00	0.00	0.00	
4,600.00	0.36	149.03	4,478.35	0.18	-813.28	812.99	0.00	0.00	0.00	
4,700.00	0.36	149.03	4,578.35	-0.35	-812.96	812.69	0.00	0.00	0.00	
4,800.00	0.36	149.03	4,678.34	-0.89	-812.64	812.38	0.00	0.00	0.00	
4,900.00	0.36	149.03	4,778.34	-1.43	-812.31	812.07	0.00	0.00	0.00	
5,000.00	0.36	149.03	4,878.34	-1.96	-811.99	811.76	0.00	0.00	0.00	
5,100.00	0.36	149.03	4,978.34	-2.50	-811.67	811.45	0.00	0.00	0.00	
5,200.00	0.36	149.03	5,078.34	-3.04	-811.35	811.15	0.00	0.00	0.00	
5,300.00	0.36	149.03	5,178.33	-3.57	-811.03	810.84	0.00	0.00	0.00	
5,400.00	0.36	149.03	5,278.33	-4.11	-810.71	810.53	0.00	0.00	0.00	
5,500.00	0.36	149.03	5,378.33	-4.64	-810.38	810.22	0.00	0.00	0.00	
5,600.00	0.36	149.03	5,478.33	-5.18	-810.06	809.92	0.00	0.00	0.00	
5,700.00	0.36	149.03	5,578.33	-5.72	-809.74	809.61	0.00	0.00	0.00	
5,800.00	0.36	149.03	5,678.32	-6.25	-809.42	809.30	0.00	0.00	0.00	
5,900.00	0.36	149.03	5,778.32	-6.79	-809.10	808.99	0.00	0.00	0.00	
6,000.00	0.36	149.03	5,878.32	-7.33	-808.77	808.69	0.00	0.00	0.00	
6,100.00	0.36	149.03	5,978.32	-7.86	-808.45	808.38	0.00	0.00	0.00	
6,200.00	0.36	149.03	6,078.32	-8.40	-808.13	808.07	0.00	0.00	0.00	
6,300.00	0.36	149.03	6,178.31	-8.93	-807.81	807.76	0.00	0.00	0.00	
6,400.00	0.36	149.03	6,278.31	-9.47	-807.49	807.46	0.00	0.00	0.00	
6,401.69	0.36	149.03	6,280.00	-9.48	-807.48	807.45	0.00	0.00	0.00	
MESAVERDE										
6,500.00	0.36	149.03	6,378.31	-10.01	-807.17	807.15	0.00	0.00	0.00	
6,600.00	0.36	149.03	6,478.31	-10.54	-806.84	806.84	0.00	0.00	0.00	
6,700.00	0.36	149.03	6,578.31	-11.08	-806.52	806.53	0.00	0.00	0.00	
6,800.00	0.36	149.03	6,678.30	-11.62	-806.20	806.23	0.00	0.00	0.00	
6,900.00	0.36	149.03	6,778.30	-12.15	-805.88	805.92	0.00	0.00	0.00	
7,000.00	0.36	149.03	6,878.30	-12.69	-805.56	805.61	0.00	0.00	0.00	
7,100.00	0.36	149.03	6,978.30	-13.22	-805.23	805.30	0.00	0.00	0.00	
7,200.00	0.36	149.03	7,078.30	-13.76	-804.91	805.00	0.00	0.00	0.00	
7,300.00	0.36	149.03	7,178.29	-14.30	-804.59	804.69	0.00	0.00	0.00	
7,400.00	0.36	149.03	7,278.29	-14.83	-804.27	804.38	0.00	0.00	0.00	
7,500.00	0.36	149.03	7,378.29	-15.37	-803.95	804.07	0.00	0.00	0.00	
7,600.00	0.36	149.03	7,478.29	-15.91	-803.63	803.77	0.00	0.00	0.00	
7,700.00	0.36	149.03	7,578.29	-16.44	-803.30	803.46	0.00	0.00	0.00	
7,800.00	0.36	149.03	7,678.29	-16.98	-802.98	803.15	0.00	0.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Site:	NBU 1022-12O PAD	North Reference:	True
Well:	NBU 1022-12N1BS-R	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 SURFACE		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,900.00	0.36	149.03	7,778.28	-17.51	-802.66	802.84	0.00	0.00	0.00
8,000.00	0.36	149.03	7,878.28	-18.05	-802.34	802.53	0.00	0.00	0.00
8,100.00	0.36	149.03	7,978.28	-18.59	-802.02	802.23	0.00	0.00	0.00
8,200.00	0.36	149.03	8,078.28	-19.12	-801.69	801.92	0.00	0.00	0.00
8,300.00	0.36	149.03	8,178.28	-19.66	-801.37	801.61	0.00	0.00	0.00
8,400.00	0.36	149.03	8,278.27	-20.20	-801.05	801.30	0.00	0.00	0.00
8,500.00	0.36	149.03	8,378.27	-20.73	-800.73	801.00	0.00	0.00	0.00
8,571.73	0.36	149.03	8,450.00	-21.12	-800.50	800.78	0.00	0.00	0.00
SEGO - PBHL_NBU 1022-N1BSX									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
DTGT_NBU 1022-N1BS - plan hits target center - Circle (radius 15.00)	0.00	0.00	3,729.00	3.88	-815.50	14,515,447.92	2,091,723.66	39.959711	-109.389509
PBHL_NBU 1022-N1BS - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,450.00	-21.12	-800.50	14,515,423.20	2,091,739.12	39.959642	-109.389455

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,327.95	2,258.00	8 5/8"	8.625	11.000	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,135.08	1,129.00	GREEN RIVER				
1,354.00	1,341.00	BIRDSNEST				
1,849.08	1,808.00	MAHOGANY				
4,226.65	4,105.00	WASATCH				
6,401.69	6,280.00	MESAVERDE				
8,571.73	8,450.00	SEGO				



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5231 & KB 4 @ 5235.00ft (PROPETRO 12)
Site:	NBU 1022-12O PAD	North Reference:	True
Well:	NBU 1022-12N1BS-R	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 SURFACE		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
250.00	250.00	0.00	0.00	Start Build 2.00
500.00	499.68	7.01	-8.35	Start 200.00 hold at 500.00 MD
700.00	698.92	18.21	-21.70	Start DLS 2.00 TFO -54.16
1,533.21	1,511.16	34.64	-193.01	Start 1317.68 hold at 1533.21 MD
2,850.88	2,749.41	12.40	-643.03	Start Drop -2.00
3,850.64	3,729.00	3.88	-815.50	Start DLS 0.30 TFO 149.03
3,970.09	3,848.45	3.56	-815.31	Start 4601.64 hold at 3970.09 MD
8,571.73	8,450.00	-21.12	-800.50	TD at 8571.73

NBU 1022-12J4BS/ 1022-12J4CS/ 1022-12N1BS-R/
1022-12N1CS/ 1022-12N4BS/ 1022-12N4CS

Surface Use Plan of Operations
1 of 9

NBU 1022-12J4BS

Surface:	1249 FSL / 2346 FEL	SWSE	Lot
BHL:	1740 FSL / 1816 FEL	NWSE	Lot

NBU 1022-12J4CS

Surface:	1240 FSL / 2341 FEL	SWSE	Lot
BHL:	1409 FSL / 1817 FEL	NWSE	Lot

NBU 1022-12N1BS-R

Surface:	1265 FSL / 2358 FEL	SWSE	Lot
BHL:	1242 FSL / 2147 FWL	SESW	Lot

NBU 1022-12N1CS

Surface:	1232 FSL / 2335 FEL	SWSE	Lot
BHL:	911 FSL / 2149 FWL	SESW	Lot

NBU 1022-12N4BS

Surface:	1224 FSL / 2329 FEL	SWSE	Lot
BHL:	580 FSL / 2150 FWL	SESW	Lot

NBU 1022-12N4CS

Surface:	1216 FSL / 2323 FEL	SWSE	Lot
BHL:	251 FSL / 2141 FWL	SESW	Lot

Pad: NBU 1022-12O PAD

Section 12 T10S R22E

Mineral Lease: UT ST UO 01197-A ST

Uintah County, Utah

Operator: Kerr-McGee Oil & Gas Onshore LP

The NBU 1022-12N1BS experience down hole problems during drilling of the surface hole and the decision was made to plug and abandon this well bore. Kerr-McGee plans to drill to the originally permitted bottom hole location by skidding a rig to the proposed NBU 1022-12N1BS-R surface location. There will be no new surface disturbance with the addition of this new well location.

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including but not limited to, APDs/SULAs/ROEs/ROWs and/or easements.)

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. Existing Roads:

Existing roads consist of county and improved/unimproved lease roads. KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

One new access road is proposed (see Topo Map B). The $\pm 570'$ access road will follow the proposed gas and liquid pipelines from the East corner of the pad to the West edge of the 1022-12P2 well pad. Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

If there are roads that are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

During the onsite, turnouts, major cut and fills, culverts, bridges, gates, cattle guards, low water crossings, or modifications needed to existing infrastructure/facilities were determined, as applicable, are typically shown on attached Exhibits and Topo maps.

C. Location of Existing and Proposed Facilities:

The NBU 1022-12O pad is a newly proposed well pad with no existing wells.

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of the well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) above ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Gathering Facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 1,300'$ and the individual segments are broken up as follows:

- $\pm 505'$ (0.09 miles) –New 6" buried gas pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.
- $\pm 795'$ (0.15 miles) –New 6" buried gas pipeline from the edge of pad to the tie-in at the proposed 1022-12P2 Intersection 8" gas pipeline. Please refer to Topo D & D2.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 1,300'$ and the individual segments are broken up as follows:

- $\pm 505'$ (0.09 miles) –New 6" buried liquid pipeline from the separator to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.
- $\pm 795'$ (0.15 miles) –New 6" buried liquid pipeline from the edge of pad to the tie-in at the proposed 1022-12P2 Intersection 6" liquid pipeline. Topo D & D2.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. KMG requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, KMG requests a temporary 45' construction right-of-way 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity and ownership, as well as to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. Location and Type of Water Supply:

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods for Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E
 Ace Oilfield in Sec. 2 T6S R20E
 MC&MC in Sec. 12 T6S R19E
 Pipeline Facility in Sec. 36 T9S R20E
 Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
 Bonanza Evaporation Pond in Sec. 2 T10S R23E
 Ouray #1 SWD in Sec. 1 T9S R21E
 NBU 159 SWD in Sec. 35 T9S R21E
 CIGE 112D SWD in Sec. 19 T9S R21E
 CIGE 114 SWD in Sec. 34 T9S R21E
 NBU 921-34K SWD in Sec. 34 T9S R21E
 NBU 921-33F SWD in Sec. 33 T9S R21E
 NBU 921-34L SWD in Sec. 34 T9S R21E

Drill cuttings and/or fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated

by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification.)

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20 mil or thicker. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, including accidental release of fluids, or release in excess of reportable quantities, will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule. Where State wells are participatory to a Federal agreement, according to NTL-3A, the appropriate Federal agencies will be notified.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or

containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1927 (NAD27) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for

interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined

and specified for each project location based on the site specific soils will be used for re-vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

SITLA
675 East 500 South, Suite 500
Salt Lake City, UT 84102

L. Other Information:

None

M. Lessee's or Operators' Representative & Certification:

Cara Mahler
Regulatory Analyst I
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6029

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

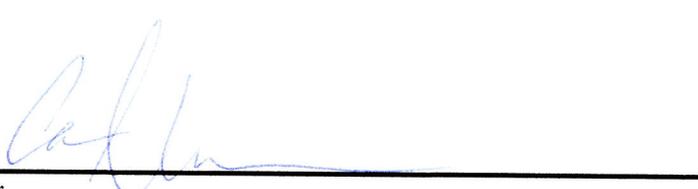
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

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



Cara Mahler

June 25, 2012
Date

From: Jim Davis
To: Doucet, Dustin; Hackford, David; Hill, Brad; Jarvis, Dan; Mahler, Ca...
CC: Bonner, Ed; Garrison, LaVonne; Scharnowske, Jaime; dianamason@utah.gov
Date: 6/26/2012 11:52 AM
Subject: Re: NBU 1022-12N1BS-R APD Submitted to UDOGM for Rig Skid Location

Thanks for the notice, Cara. Please consider this email SITLA's approval of the needed change. Good luck.
-Jim

>>> "Mahler, Cara" <Cara.Mahler@anadarko.com> 6/26/2012 11:33 AM >>>

Good Afternoon,

I just wanted to give everyone a heads up that I have just submitted a new APD for the NBU 1022-12N1BS-R. The new APD is for a rig skid location that is needed after Kerr-McGee made the decision to plug and abandon the NBU 1022-12N1BS after unexpected issues while drilling the location. The new APD will be on the previously approved NBU 1022-12O pad and no additional surface disturbance will be created with the drilling of this new rig skid location. It is my understanding that no onsite will be needed for this new permit since the pad has already been on sited with the NBU 1022-12N1BS location.

Jim, please consider this Kerr-McGee's official notification of this proposed action and please let us know if you have any questions before you can give your approval.

Thanks!
Cara Mahler
Regulatory Analyst I
Anadarko Petroleum
720-929-6029
P Please consider the environment before printing this email

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Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 1022-12N1BS-R 43047			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2250	8572		
Previous Shoe Setting Depth (TVD)	40	2250		
Max Mud Weight (ppg)	8.3	12.5		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5155	11.6		

Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	971	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	701	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	476	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	485	NO No expected pressure
Required Casing/BOPE Test Pressure=		2250	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	5572	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4543	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3686	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4181	NO Reasonable
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2250	psi *Assumes 1psi/ft frac gradient

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

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

43047528730000 NBU 1022-12N1BS -R

Casing Schematic

✓ 1. p surf. cont.

8-5/8"
MW 8.3
Frac 19.3

4-1/2"
MW 12.5

Surface

1270

1251

Uinta

to surf @ 8% w/o, tail 3161'

TOC @ 765

1025' Green River tail 949'

TOC @ 1062

1330' Birds Nest *st+p ✓

1505' tail

1720' Mahogany

Surface

2328. MD
2250. TVD

3340' ± BMSW

3672' tail

4096' Wasatch ✓

6268' Mesaverde

7223' MVU2

7769' MV L1

Production
8572. MD
8450. TVD

1265 FSL
- 21

1244 FSL ✓

2358 FEL
901

3159 EL
5288

2129 FWM ✓ OK

SE SW sec 12-10S-22E

Well name:	43047 52873 0000 NBU 1022-12N1BS → R	
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.	
String type:	Surface	Project ID: 43-047- 52873
Location:	UINTAH COUNTY	

Design parameters:

Collapse

Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,910 psi
Internal gradient: 0.120 psi/ft
Calculated BHP: ~~2250~~ 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: 1,896 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 103 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,062 ft

Directional Info - Build & Drop

Kick-off point: 300 ft
Departure at shoe: 470 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 20 °

Re subsequent strings:

Next setting depth: 8,556 ft
Next mud weight: 12.500 ppg
Next setting BHP: 5,556 psi
Fracture mud wt: 19.250 ppg
Fracture depth: ~~2250~~ ft
Injection pressure: ~~2250~~ 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	2328	8.625	28.00	I-55	LT&C	2250	2328	7.892	85932

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	975	1880	1.93	2250	3390	1.507	58.7	348	5.93 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: November 21, 2011
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2097 ft, a mud weight of 8.33 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

API Well Number: 430475 ~~2873~~0000

Well name:	430475 2873 0000 NBU 1022-12N1BS - R	
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.	
String type:	Production	Project ID: 43-047- 52873
Location:	UINTAH COUNTY	

Design parameters:

Collapse

Mud weight: 12.500 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 192 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Burst

Max anticipated surface pressure: 3,621 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,477 psi

No backup mud specified.

Burst:

Design factor 1.00

Cement top: 765 ft

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)

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 807 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

Tension is based on air weight.

Neutral point: 6,980 ft

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	8572	4.5	11.60	I-80	LT&C	8434	8572	3.875	112939

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	5477	6360	1.161	5477	7780	1.42	97.8	212	2.17 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: November 21, 2011
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8434 ft, a mud weight of 12.5 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.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/26/2012

API NO. ASSIGNED: 43047528730000

WELL NAME: NBU 1022-12N1BS-R

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

PHONE NUMBER: 720 929-6029

CONTACT: Cara Mahler

PROPOSED LOCATION: SWSE 12 100S 220E

Permit Tech Review:

SURFACE: 1265 FSL 2358 FEL

Engineering Review:

BOTTOM: 1242 FSL 2147 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.95965

LONGITUDE: -109.38733

UTM SURF EASTINGS: 637741.00

NORTHINGS: 4424524.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: UO 01197-A

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 3 - State

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE/FEE - 22013542
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 43-8496
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

LOCATION AND SITING:

- R649-2-3.
- Unit: NATURAL BUTTES
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 173-14
- Effective Date: 12/2/1999
- Siting: 460' Fr U Bdry & Uncommitted Tracts
- R649-3-11. Directional Drill

Comments: Presite Completed
RIGSKID FR 4304751959:

Stipulations: 3 - Commingling - ddoucet
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason
22 - Rigskid - bhll
25 - Surface Casing - ddoucet



GARY R. HERBERT
Governor

GREGORY S. BELL
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: NBU 1022-12N1BS-R

API Well Number: 43047528730000

Lease Number: UO 01197-A

Surface Owner: STATE

Approval Date: 7/2/2012

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

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 Cause 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE 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

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

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:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

All conditions of approval in the Statement of Basis and RDCC comments from the NBU 1022-12N1BS well permit apply to the NBU 1022-12N1BS-R well.

Surface casing shall be cemented to the surface.

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:

A handwritten signature in black ink, appearing to read "J. Rogers", written in a cursive style.

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A
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: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047528730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511 9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	COUNTY: Uintah STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 7/30/2012	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

MIRU TRIPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.
 RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CEMENT WITH 28
 SACKS READY MIX. SPUD WELL LOCATION ON JULY 30, 2012 AT 08:30
 HRS.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 August 02, 2012**

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regularatory Analyst
SIGNATURE N/A	DATE 8/2/2012	

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
 Submitted By CARA MAHLER Phone Number 720.929.6029
 Well Name/Number NBU 1022-12N1BS-R
 Qtr/Qtr SWSE Section 12 Township 10S Range 22E
 Lease Serial Number UO 01197-A
 API Number 4304752873

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 07/30/2012 07:00 HRS AM PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
 Intermediate Casing
 Production Casing
 Liner
 Other

Date/Time 08/06/2012 08:00 HRS AM PM

BOPE

- Initial BOPE test at surface casing point
 BOPE test at intermediate casing point
 30 day BOPE test
 Other

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT

435.828.0986 OR LOVELL YOUNG AT 435.781.7051

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

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
 Address: P.O. Box 173779
city DENVER
state CO zip 80217 Phone Number: (720) 929-6304

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752873	NBU 1022-12N1BS-R		SWSE	12	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	7/30/2012			8/20/2012	
Comments: MIRU TRIPLE A BUCKET RIG. WSMVD SPUD WELL LOCATION ON 7/30/2012 AT 08:30 HRS. BHL:SESU							

Well 2

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

Well 3

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

ACTION CODES:

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

Name (Please Print) Jaimie Schaefer
 Signature _____
 REGULATORY ANALYST 8/2/2012
 Title _____ Date _____

RECEIVED
AUG 03 2012

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	
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: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-12N1BS-R	
9. API NUMBER: 43047528730000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
9. STATE: UTAH	
1. TYPE OF WELL Gas Well	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 PHONE NUMBER: 720 929-6511	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 1/2/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

No Activity for the month of December 2012. Well TD at 2,380

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 January 03, 2013

NAME (PLEASE PRINT) Lindsey Frazier	PHONE NUMBER 720 929-6857	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 1/2/2013	

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: UO 01197-A
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	9. API NUMBER: 43047528730000
5. PHONE NUMBER: 720 929-6511	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/8/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

No Activity for the month of March 2013. Well TD at 2380 ft.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 April 09, 2013**

NAME (PLEASE PRINT) Luke Urban	PHONE NUMBER 720 929-6501	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 4/8/2013	

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: UO 01197-A
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	9. API NUMBER: 43047528730000
5. PHONE NUMBER: 720 929-6511	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/29/2013	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The operator requests approval for changes in the drilling plan. Specifically, the operator requests approval for a FIT wavier, closed loop drilling option, and a production casing change. The production casing change includes a switch from 4.5 inch I-80 11.6 BTC/LTC casing to 4.5 inch HCP 110 11.6 LB Ultra DQX/LTC casing. All other aspects of the previously approved drilling plan will not change. Please see closed loop attachment.

**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: May 02, 2013

By: *Derek Duff*

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 4/29/2013	

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	
SUNDRY NOTICES AND REPORTS ON WELLS	
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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047528730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/3/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

No activity for the month of May 2013. Well TD at Drilled to 2,380 ft.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 June 04, 2013**

NAME (PLEASE PRINT) Matthew P Wold	PHONE NUMBER 720 929-6993	TITLE Regulatory Analyst I
SIGNATURE N/A	DATE 6/3/2013	

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: UO 01197-A
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S		9. API NUMBER: 43047528730000
PHONE NUMBER: 720 929-6511		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
COUNTY: UINTAH		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/1/2013	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. No activity for the month of June 2013. Well TD at Drilled to 4 ft.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 01, 2013		
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 7/1/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	
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.	
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
PHONE NUMBER: 720 929-6511	9. API NUMBER: 43047528730000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/5/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

REVISED JUNE MONTHLY DRILL SUNDRY No activity for the month of June 2013. Well TD at 2380 ft.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 July 05, 2013**

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 7/5/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	
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: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-12N1BS-R	
9. API NUMBER: 43047528730000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
1. TYPE OF WELL Gas Well	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 PHONE NUMBER: 720 929-6511	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	
COUNTY: UINTAH	
STATE: UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/5/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

No activity for the month of July 2013. Well TD at 2,395 ft.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 August 05, 2013

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 8/5/2013	

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By SYD GRIFFIN Phone Number 435-790-2921
Well Name/Number NBU 1022-12N1BS-R
Qtr/Qtr SW/SE Section 12 Township 10S Range 22E
Lease Serial Number UT ST UO 01997-A ST
API Number 4304752873

Casing – Time casing run starts, not cementing times.

- Production Casing
 Other

Date/Time 8/8/2013 10-12 AM PM

BOPE

- Initial BOPE test at surface casing point
 Other

Date/Time _ _ AM PM

Rig Move

Location To: NBU 1022-12P O PAD

Date/Time _ _ AM PM

Remarks WELL 6 OF 6 ON THE NBU 1022-12 O PAD
TIMES ARE APPROXIMATE

RECEIVED

AUG 08 2013

DIV. OF OIL, GAS & MINING

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By SYD GRIFFIN Phone Number 435-790-2921
Well Name/Number NBU 1022-12N1BS-R
Qtr/Qtr SW/SE Section 12 Township 10S Range 22E
Lease Serial Number UT ST UO 01997-A ST
API Number 4304752873

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time _ _ AM PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time 8/4/2013 2:00 AM PM

Rig Move

Location To: NBU 1022-12P O PAD

Date/Time _ _ AM PM

RECEIVED

AUG 03 2013

DIV. OF OIL, GAS & MINING

Remarks WELL 6 OF 6 ON THE NBU 1022-12 O PAD
TIMES ARE APPROXIMATE

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By SYD GRIFFIN Phone Number 435-790-2921
Well Name/Number NBU 1022-12N1BS-R
Qtr/Qtr SW/SE Section 12 Township 10S Range 22E
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Casing – Time casing run starts, not cementing times.

- Production Casing
 Other

Date/Time 8/8/2013 10-12 AM PM

BOPE

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 Other

Date/Time _ _ AM PM

Rig Move

Location To: NBU 1022-12P O PAD

Date/Time _ _ AM PM

Remarks WELL 6 OF 6 ON THE NBU 1022-12 O PAD
TIMES ARE APPROXIMATE

RECEIVED

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DIV. OF OIL, GAS & MINING

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By SYD GRIFFIN Phone Number 435-790-2921
Well Name/Number NBU 1022-12N1BS-R
Qtr/Qtr SW/SE Section 12 Township 10S Range 22E
Lease Serial Number UT ST UO 01997-A ST
API Number 4304752873

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time _ _ AM PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time 8/4/2013 2:00 AM PM

Rig Move

Location To: NBU 1022-12P O PAD

Date/Time _ _ AM PM

RECEIVED

AUG 03 2013

DIV. OF OIL, GAS & MINING

Remarks WELL 6 OF 6 ON THE NBU 1022-12 O PAD
TIMES ARE APPROXIMATE

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	

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: NATURAL BUTTES	

1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
------------------------------------	--

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047528730000
---	---

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
---	--------------------------------------	--

4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	COUNTY: UINTAH
STATE: UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: _____ <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: _____ <input type="checkbox"/> SPUD REPORT Date of Spud: _____ <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/4/2013	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 Drilled to 8,560 ft. in August 2013.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 October 02, 2013

NAME (PLEASE PRINT) Matthew P Wold	PHONE NUMBER 720 929-6993	TITLE Regulatory Analyst I
SIGNATURE N/A	DATE 9/4/2013	

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: UO 01197-A
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		9. API NUMBER: 43047528730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S		COUNTY: UINTAH
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 10/4/2013	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Started completing the well. Well TD at 8,560 ft.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY October 07, 2013		
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Teena Paulo	720 929-6236	Staff Regulatory Specialist
SIGNATURE		DATE
N/A		10/4/2013

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	
SUNDRY NOTICES AND REPORTS ON WELLS	
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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-12N1BS-R	
9. API NUMBER: 43047528730000	
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3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 PHONE NUMBER: 720 929-6511	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	
COUNTY: UINTAH	
STATE: UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 10/23/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION 10/23/2013. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 October 30, 2013

NAME (PLEASE PRINT) Kay E. Kelly	PHONE NUMBER 720 929 6582	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 10/29/2013	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UO 01197-A	
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: NATURAL BUTTES	
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-12N1BS-R
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047528730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6511
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1265 FSL 2358 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	COUNTY: UINTAH
STATE: UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/26/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

FINISHED DRILLING TO 8560 ON 8/8/2013. CEMENTED PRODUCTION CASING. RELEASED PIONEER 54 RIG ON 8/9/2013. DETAILS OF CASING AND CEMENT WAS INCLUDED WITH THE WELL COMPLETION REPORT.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 November 26, 2013

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 11/26/2013	

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

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER:
ST UT UO 01197A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU 63047A

8. WELL NAME and NUMBER:
NBU 1022-12N1BS-R

9. API NUMBER:
43-047-52873

10. FIELD AND POOL, OR WILDCAT
Natural Buttes

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
SWSE 12 10S 22E SLB

12. COUNTY
UINTAH

13. STATE
UTAH

14. DATE SPUDDED: **7/30/2012**

15. DATE T. D. REACHED: **8/8/2013**

16. DATE COMPLETED: **10/23/2013**

ABANDONED READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):
5250 RKB

18. TOTAL DEPTH: MD **8560** TVD **8441**

19. PLUG BACK T.D.: MD **8501** TVD **8382**

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
CBL/GR/CCL/TEMP-MULTI FINGER CALIPER

23. WAS WELL CORED? YES NO (Submit analysis)
WAS DST RUN? YES NO (Submit report)
DIRECTIONAL SURVEY? YES NO (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
20	14 STL	36.7	0	40		28			
11	8.63 J55	28	15	2357		575		0	
7.875	4.5 I-80	11.6	19	8549		1425		2900	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.375	8068							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) MESAVERDE	6422	8481			6,422 8,481	0.36	234	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

27. PERFORATION RECORD

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6422-8481	PUMP 13,246 BBL SLICKWATER AND 273,686 LBS 30/50 MESH SAND
	10 STAGES

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS GEOLOGICAL REPORT DST REPORT DIRECTIONAL SURVEY

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER:

30. WELL STATUS:
PRODUCING

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED: 10/23/2013		TEST DATE: 10/31/2013		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 21	GAS - MCF: 2665	WATER - BBL: 0	PROD. METHOD: Flowing
CHOKE SIZE: 20/64	TBG. PRESS. 1588	CSG. PRESS. 2132	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR RATES: →	OIL - BBL: 21	GAS - MCF: 2665	WATER - BBL: 0	INTERVAL STATUS Producing

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 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 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 RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS

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

SOLD

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.

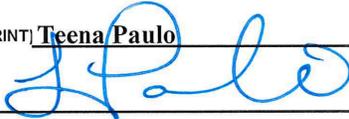
34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER	1004
				BIRD'S NEST	1502
				MAHOGANY	1915
				WASATCH	4265
				MESAVERDE	6400

35. ADDITIONAL REMARKS (Include plugging procedures)

The first 210 ft. of the surface hole was drilled with a 1 1/4 in. bit. The remainder of surface hole was drilled with an 11 in. bit. DQX csg was run from surface to 5067 ft.; LTC csg was run from 5067 ft. to 8549 ft. Attached is the chronological well history, perforation report & final survey.

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

NAME (PLEASE PRINT) Teena Paulo TITLE Staff Regulatory Specialist
 SIGNATURE  DATE 11-21-2013

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- 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 Phone: 801-538-5340
 1594 West North Temple, Suite 1210
 Box 145801 Fax: 801-359-3940
 Salt Lake City, Utah 84114-5801

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE				Spud Date: 8/19/2012			
Project: UTAH-UINTAH			Site: NBU 1022-12O PAD			Rig Name No: PROPETRO 12/12, PIONEER 54/54	
Event: DRILLING			Start Date: 8/2/2012		End Date: 8/9/2013		
Active Datum: RKB @5,250.00usft (above Mean Sea Level)				UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/18/2012	18:00 - 0:00	6.00	DRLSUR	01	A	P		MOVE RIG 22 MILES TO THE NBU 1022-12N1BS MOVED ALL PRO PETRO EQUIPMENT AND MAN CAMPS CONTINUE TO CLEAN MUD TANKS AND RIG DOWN CLOSED LOOP WAIT ON DAYLIGHT TO FINISH RIG MOVE
8/19/2012	0:00 - 6:00	6.00	DRLSUF	01	A	P		FINISH WORKING ON PUMPS AND WAIT ON DAYLIGHT TO MOVE CLOSED LOOP SYSTEM
	6:00 - 13:00	7.00	DRLSUF	01	A	P		MOVE CLOSED LOOP SYSTEM AND MUD MUP 22.5 MILES TO NEW LOCATION J.D. FIELD SERVICES ONLY SHOWED UP WITH 3 TRUCKS AND NOT THE 8 THAT THEY SHOULD HAVE AND MADE FOR A 3 TRIP MOVE.
	13:00 - 16:30	3.50	DRLSUF	01	B	P		RIG UP RIG AND CLOSED LOOP SYSTEM FILL TANKS AND PREPARE TO SPUD
	16:30 - 18:00	1.50	DRLSUF	02	C	P		SPUD DRILL 12.25" HOLE 44 ft TO 210 ft (166 FT, 111 FPH). WOB 5-15 Kips. GPM 491. PSI ON/OFF 750/500. SURFACE RPM 55, MOTOR 83, TOTAL RPM 138. UP/DOWN/ ROT 20/20/20 K. DRAG 0 Kips . CIRCULATE CLOSED LOOP SYSTEM DRILL DOWN TO 210 ft W/6 in COLLARS. NOV ON LINE NO HOLE ISSUES.
	18:00 - 19:30	1.50	DRLSUF	06	A	P		TRIP OUT OF HOLE PICK UP DIRECTIONAL ASSEMBLY AND INSTAL MWD TOOLS 11" BIT AND MUD MOTOR ORIENT TO MUD MOTOR AND TRIP IN
	19:30 - 21:00	1.50	DRLSUF	02	C	P		DRILL 11" SURFACE HOLE F/ 210' - 440' WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/640. ROTARY RPM 48, MOTOR RPM 83, TOTAL RPM 131. UP/DOWN/ ROTATE 50/47/48 K. DRAG 2 K. CIRCULATE CLOSED LOOP SYSTEM NOV ON LINE WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS. 140 API SCREENS ON SHAKERS. NO HOLE ISSUES.
	21:00 - 22:30	1.50	DRLSUF	06	A	Z		TROUBLE SHOOT MAGNETIC INTERFERENCE ON MWD TOOLS DETERMINED WE WERE GETTING INTERFERENCE FROM STRING IN THE OTHER WELL. DECIDED TO GET A GYRO TOOL OUT. TRIPPED OUT OF HOLE

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE

Spud Date: 8/19/2012

Project: UTAH-UINTAH

Site: NBU 1022-12O PAD

Rig Name No: PROPETRO 12/12, PIONEER 54/54

Event: DRILLING

Start Date: 8/2/2012

End Date: 8/9/2013

Active Datum: RKB @5,250.00usft (above Mean Sea Level)

UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	22:30 - 0:00	1.50	DRLSUF	21	D	P		WAITING ON GYRO TOOL FROM GRAND JUNCTION CO
8/20/2012	0:00 - 3:30	3.50	DRLSUR	21	D	Z		WAIT ON GYRO TOOLS
	3:30 - 5:00	1.50	DRLSUR	06	A	Z		PICK UP GYRO TOOLS ORIENT TO MUD MOTOR TRIP IN HOLE
	5:00 - 14:00	9.00	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 440' - 1190' AVE ROP 83 FT/HR WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/640. ROTARY RPM 48, MOTOR RPM 83, TOTAL RPM 131. UP/DOWN/ ROTATE 50/47/48 K. DRAG 2 K. CIRCULATE CLOSED LOOP SYSTEM NOV ON LINE WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS. 140 API SCREENS ON SHAKERS. NO HOLE ISSUES. GYRO SURVEYS TAKE 4 MIN MADE FOR SLOWER DRILLING
	14:00 - 16:00	2.00	DRLSUR	06	A	P		TOOH FOR GYRO TOOLS, TAKE OUT GYRO REORIENT EM TOOLS AND TRIP IN HOLE
	16:00 - 21:30	5.50	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 1190' - 1460' AVE ROP 49 FT/HR LOSS CIRCULATION AT 1250' WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/640. ROTARY RPM 48, MOTOR RPM 83, TOTAL RPM 131. UP/DOWN/ ROTATE 50/47/48 K. DRAG 2 K. CIRCULATE CLOSED LOOP SYSTEM NOV ON LINE WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS. 140 API SCREENS ON SHAKERS. NO HOLE ISSUES. NOV EQUIPMENT COULD NOT KEEP UP WITH THE RIG WHILE JAMMING AIR. RIG HAD TO CONSTANTLY QUIT DRILLING TO WAIT ON NOV EQUIPMENT TO CATCH UP MAKING DRILLING SIGNIFICANTLY SLOWER AND THE NEED FOR ADDITIONAL DIRECTIONAL WORK
	21:30 - 22:30	1.00	DRLSUR	08	B	Z		*** FAILURE NOV. NOV RAN THE RIG OUT OF WATER DID NOT TELL DRILLER THAT THE FRAC TANKS WERE GETTING LOW. WAITED ON AIR TO COME AROUND TO FILL FRAC TANKS

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE		Spud Date: 8/19/2012	
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 8/2/2012	End Date: 8/9/2013
Active Datum: RKB @5,250.00usft (above Mean Sea Level)		UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	22:30 - 0:00	1.50	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 1460' - 1760' AVE ROP 100 FT/HR LOSS CIRCULATION AT 1250' WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/640. ROTARY RPM 48, MOTOR RPM 83, TOTAL RPM 131. UP/DOWN/ ROTATE 50/47/48 K. DRAG 2 K. CIRCULATE CLOSED LOOP SYSTEM NOV ON LINE WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS. 140 API SCREENS ON SHAKERS. NO HOLE ISSUES. NOV EQUIPMENT COULD NOT KEEP UP WITH THE RIG WHILE JAMMING AIR. RIG HAD TO CONSTANTLY QUIT DRILLING TO WAIT ON NOV EQUIPMENT TO CATCH UP MAKING DRILLING SIGNIFICANTLY SLOWER AND THE NEED FOR ADDITIONAL DIRECTIONAL WORK
8/21/2012	0:00 - 1:00	1.00	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 1760' - 1850" AVE ROP 90 FT/HR LOSS CIRCULATION AT 1250' WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/640. ROTARY RPM 48, MOTOR RPM 83, TOTAL RPM 131. UP/DOWN/ ROTATE 78/60/68 K. DRAG 2 K. CIRCULATE CLOSED LOOP SYSTEM NOV ON LINE WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS. 140 API SCREENS ON SHAKERS. NO HOLE ISSUES. NOV EQUIPMENT COULD NOT KEEP UP WITH THE RIG WHILE JAMMING AIR. RIG HAD TO CONSTANTLY QUIT DRILLING TO WAIT ON NOV EQUIPMENT TO CATCH UP MAKING DRILLING SIGNIFICANTLY SLOWER AND THE NEED FOR ADDITIONAL DIRECTIONAL WORK
	1:00 - 1:30	0.50	DRLSUR	08	B	Z		*** FAILURE NOV RAN RIG OUT OF WATER PUMPS COULD NOT KEEP UP

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE		Spud Date: 8/19/2012	
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 8/2/2012	End Date: 8/9/2013
Active Datum: RKB @5,250.00usft (above Mean Sea Level)		UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	1:30 - 8:00	6.50	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/ 1850' - 2380' T.D. ' AVE ROP 88 FT/HR LOSS CIRCULATION AT 1250' WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/640. ROTARY RPM 48, MOTOR RPM 83, TOTAL RPM 131. UP/DOWN/ ROTATE 78/60/68 K. DRAG 2 K. CIRCULATE CLOSED LOOP SYSTEM NOV ON LINE WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS. 140 API SCREENS ON SHAKERS. NO HOLE ISSUES.
	8:00 - 10:00	2.00	DRLSUR	05	C	P		CIRCU;LATE AND CONDITION MUD PRIOR TO LDDS
	10:00 - 16:30	6.50	DRLSUR	06	A	P		TOOH LAYING DOWN DRILL STRING BREAK DOWN ALL BHA FOR INSPECTION L/D EM TOOL MUD MOTOR AND BIT
	16:30 - 20:00	3.50	DRLSUR	12	C	P		RIG UP AND RUN 53 JOINTS OF 8.625" J-55 28# SURFACE CASING SHOE AT 2342' BAFFLE AT 2298' NO PROBLEMS GETTING CASING TO BOTTOM
	20:00 - 0:00	4.00	DRLSUR	12	E	P		PRESSURE TEST LINES TO 2000 PSI. PUMP 135 BBLs OF WATER AHEAD. CATCH PSI. PUMP 20 BBLs OF 8.3# GEL WATER AHEAD. MIX AND PUMP (300 SX) 61.4 BBLs OF 15.8# 1.15 YD 5 GAL/SK PREMIUM CEMENT W/ 2% CALC. DROP PLUG ON FLY. DISPLACE W/ 143 BBLs OF H2O. NO CIRC THROUGH OUT. FINAL LIFT OF 210 PSI AT 4 BBL/MIN. BUMP PLUG WITH 500 PSI FOR 5 MIN. FLOAT HELD. MIX AND PUMP (150 SX) 30.7 BBLs OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE, NO CEMENT TO SURFACE. SHUT DOWN AND CLEAN TRUCK.. WAIT 1.5 HOURS MIX AND PUMP (125 SX) 22.4 BBLs OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE NO CEMENT TO SURFACE. NO CEMENT TO SURFACE. SHUT DOWN AND CLEAN TRUCK. WILL TOP OUT WITH READY MIX TRUCK RELEASE RIG 8-21-12 @ 23:59
8/4/2013	19:30 - 21:30	2.00	MIRU3	01	C	P	2395	SKID RIG 20' TO NBU 1022-12N1BS-R
	21:30 - 23:00	1.50	PRPSPD	14	A	P	2395	NIPPLE UP BOPE
	23:00 - 0:00	1.00	PRPSPD	15	A	P	2395	RIG UP B & C TESTERS, TEST BOPE
8/5/2013	0:00 - 3:30	3.50	PRPSPD	15	A	P	2395	, TEST BLIND RAMS, PIPE RAMS, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH, CASING 1,500 FOR 30 MIN
	3:30 - 4:00	0.50	PRPSPD	14	B	P	2395	INSTALL WEAR BUSHING
	4:00 - 6:00	2.00	PRPSPD	06	A	P	2395	P/U BHA / DIRECTIONAL TOOLS, TIH T/ 2,200'
	6:00 - 7:30	1.50	PRPSPD	09	A	P	2395	SLIP AND CUT DRILLING LINE

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE

Spud Date: 8/19/2012

Project: UTAH-UINTAH

Site: NBU 1022-12O PAD

Rig Name No: PROPETRO 12/12, PIONEER 54/54

Event: DRILLING

Start Date: 8/2/2012

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UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:30 - 8:00	0.50	PRSPD	07	A	P	2395	RIG SERVICE
	8:00 - 10:00	2.00	DRLPRC	02	F	P	2395	TAG CEMENT @ 2,203', DRILL CEMENT, BAFFEL @ 2,298', SHOE @ 2,342'
	10:00 - 21:00	11.00	DRLPRC	02	D	P	2395	DRILL /SLIDE / SURVEY / F/ 2,395' T/ 3,950' = 1,555' = 141' FPH WOB 18,000-23,000 TOP DRIVE RPM 60-65 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,050/1,650 TORQUE ON/OFF BTM 11,000/6,200 PICK UP WT 123,000 SLACK OFF WT 72,000 ROT WT 98,000 SLIDE 193' IN 129 MIN. 10% OF FOOTAGE DRILLED, 5% OF HRS DRILLED 0 BBL FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 8.5 VIS 30 NOV-D WATER
	21:00 - 0:00	3.00	DRLPRV	02	B		3950	DRILL /SLIDE / SURVEY / F/ 3,950' T/ 4,341' = 391' = 130' FPH WOB 18,000-23,000 TOP DRIVE RPM 60-65 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,050/1,650 TORQUE ON/OFF BTM 11,000/6,200 PICK UP WT 125,000 SLACK OFF WT 75,000 ROT WT 100,000 SLIDE 20' IN 15 MIN. 19.5% OF FOOTAGE DRILLED, 12% OF HRS DRILLED 6' NORTH 14' WEST 0 BBL FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 8.5 VIS 30 NOV-D WATER

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE

Spud Date: 8/19/2012

Project: UTAH-UINTAH

Site: NBU 1022-12O PAD

Rig Name No: PROPETRO 12/12, PIONEER 54/54

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Start Date: 8/2/2012

End Date: 8/9/2013

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UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/6/2013	0:00 - 6:00	6.00	DRLPRV	02	B	P	4341	DRILL /SLIDE / SURVEY / F/ 4,341' T/ 5,129' = 788' = 131.3' FPH WOB 18,000-23,000 TOP DRIVE RPM 60-65 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,050/1,650 TORQUE ON/OFF BTM 11,000/6,200 PICK UP WT 135,000 SLACK OFF WT 75,000 ROT WT 100,000 SLIDE 10' IN 15 MIN. 1.2% OF FOOTAGE DRILLED, 4.5% OF HRS DRILLED 0 BBL FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 8.5 VIS 30 NOV-D WATER
	6:00 - 15:30	9.50	DRLPRV	02	B	P	5129	DRILL /SLIDE / SURVEY / F/ 5,129' T/ 5,947' = 818' = 86" FPH WOB 18,000-23,000 TOP DRIVE RPM 60-65 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,050/1,650 TORQUE ON/OFF BTM 11,000/6,200 PICK UP WT 159,000 SLACK OFF WT 78,000 ROT WT 100,000 SLIDE ' IN 129 MIN. 10% OF FOOTAGE DRILLED, 5% OF HRS DRILLED 0 BBL FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 8.5 VIS 30 NOV-D WATER
	15:30 - 16:00	0.50	DRLPRV	07	A	P	5947	RIG SERVICE
	16:00 - 19:00	3.00	DRLPRV	02	B	P	5947	DRILL /SLIDE / SURVEY / F/ 5,947' T/ 6,136' = 189' = 63' FPH WOB 18,000-28,000 TOP DRIVE RPM 60-65 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,250/1,800 TORQUE ON/OFF BTM 11,000/6,200 PICK UP WT 163,000 SLACK OFF WT 100,000 ROT WT 127,000 SLIDE 12' IN 15 MIN. 15% OF FOOTAGE DRILLED, 12% OF HRS DRILLED 0 BBL FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 8.5 VIS 30 NOV-D WATER
	19:00 - 19:30	0.50	DRLPRV	05	C	P	6136	CIRCULATE , SPOT 80 BBL 11.4 WT ON BOTTOM

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE			Spud Date: 8/19/2012		
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD		Rig Name No: PROPETRO 12/12, PIONEER 54/54	
Event: DRILLING		Start Date: 8/2/2012		End Date: 8/9/2013	
Active Datum: RKB @5,250.00usft (above Mean Sea Level)			UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	19:30 - 21:30	2.00	DRLPRV	06	A	P	6136	PUMP SLUG , POOH TO 4,700' , WELL FLOWING , FILL PIPE , TIH
	21:30 - 0:00	2.50	DRLPRV	05	B	P	6136	CIRCULATE , DISPLACE HOLE WITH 11.4 WT MUD , PUMP SLUG
8/7/2013	0:00 - 2:30	2.50	DRLPRV	06	A	P	6136	CHECK FOR FLOW, PULL OUT OF HOLE , LAY DOWN MUD MOTOR & BIT
	2:30 - 5:00	2.50	DRLPRV	06	A	P	6136	PICK UP MUD MOTOR & BIT , TRIP IN HOLE , FILL @ 2,300'
	5:00 - 16:30	11.50	DRLPRV	02	B		6136	DRILL /SLIDE / SURVEY / F/ 6,136' T/ 6,987' = 851' = 74' FPH WOB 18,000-20,000 TOP DRIVE RPM 60-70 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,350/1,800 TORQUE ON/OFF BTM 13,800/10,600 PICK UP WT 180,000 SLACK OFF WT 90,000 ROT WT 150,000 SLIDE 67' IN 105 MIN. 12% OF FOOTAGE DRILLED, 7%OF HRS DRILLED 0 BBLs FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 8.9 VIS 30 NOV-CONVENTIONAL
	16:30 - 17:00	0.50	DRLPRV	07	A	P	6987	RIG SERVICE
	17:00 - 0:00	7.00	DRLPRV	02	B		6987	DRILL /SLIDE / SURVEY / F/ 6,987' T/ 7,500' = 513' = 73' FPH WOB 18,000-20,000 TOP DRIVE RPM 60-70 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,400/2,100 TORQUE ON/OFF BTM 12,700/9,800 PICK UP WT 210,000 SLACK OFF WT 105,000 ROT WT 150,000 SLIDE 20' IN 40 MIN. 5% OF FOOTAGE DRILLED, 10.5%OF HRS DRILLED 0 BBLs FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 9.0 VIS 30 NOV-CONVENTIONAL

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE

Spud Date: 8/19/2012

Project: UTAH-UINTAH

Site: NBU 1022-12O PAD

Rig Name No: PROPETRO 12/12, PIONEER 54/54

Event: DRILLING

Start Date: 8/2/2012

End Date: 8/9/2013

Active Datum: RKB @5,250.00usft (above Mean Sea Level)

UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/8/2013	0:00 - 14:30	14.50	DRLPRV	02	B	P	7500	DRILL /SLIDE / SURVEY / F/ 7,500' T/ 8,560' = 1060' = 73' FPH WOB 18,000-20,000 TOP DRIVE RPM 60-70 MUD MOTOR RPM 135 PUMPS 200 SPM = 586 GPM PUMP PRESSURE ON/OFF BTM 2,400/2,100 TORQUE ON/OFF BTM 12,700/9,800 PICK UP WT 205,000 SLACK OFF WT 120,000 ROT WT 155,000 0 BBLs FLUID LOST PUMPING 10-15 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & CEDAR FIBER , NUT SHELL MUD WT 11.5 VIS 38
	14:30 - 15:00	0.50	DRLPRV	07	A	P	8560	RIG SERVICE
	15:00 - 16:00	1.00	DRLPRV	05	B	P	8560	CIRCULATE BRING MUD WT UP 11.8 PPG
	16:00 - 17:00	1.00	DRLPRV	06	E	P	8560	TRIP OUT 10 STANDS, TRIP IN HOLE
	17:00 - 18:00	1.00	DRLPRV	05	B	P	8560	CIRCULATE AND PUMP SLUG
	18:00 - 21:30	3.50	DRLPRV	06	A	P	8560	CHECK FOR FLOW, TRIP OUT OF HOLE, L/D MWD-MUD MOTOR - BIT
	21:30 - 22:00	0.50	DRLPRV	14	B	P	8560	REMOVE WEAR BUSHING
	22:00 - 22:30	0.50	CSGPRO	12	A	P		R/U KIMZEY CASING EQUIPMENT
	22:30 - 0:00	1.50	CSGPRO	12	C	P	8560	M/U FLOAT EQUIP,TEST FLOATS, RUN 4 1/2 CASING
8/9/2013	0:00 - 4:30	4.50	CSGPRO	12	C		8560	RUN 80 JTS N-80 11.6# LTC 4.5 CASING +1 CROSSOVER LTC/ DQX /113 JTS I-80 11.6# DQX 4.5 CASING+ RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / LANDING CASING MANDREL IN BOWL W/ 65,000 @ 8,548' FOR CIRC & CEMENTING / FC @ 8,502' /MV MKR @ 6,418' X/O @ 5,001'
	4:30 - 6:00	1.50	CSGPRO	05	D		8560	CIRCULATE CASING FOR CEMENT
	6:00 - 9:00	3.00	CSGPRO	12	E		8560	INSTALL BJ CMT HEAD , TEST PUMP & LINES TO 4700 PSI, DROP BOTTOM PLUG PUMP 25 BBLs FW, PUMP 460 SKS LEAD CEMENT @ 12.5 PPG, 164 BBL SLURRY (PREM LITE II + .025 pps CELLO FLAKE + 5 pps KOL SEAL +0.4 bwocFL52+ .05 lb/sx STATIC FREE + 8% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + 0.35 % R-3 + 101.8% FRESH WATER / (10.44 gal/sx, 1.98 yield) + 960 SX TAIL @ 14.3 ppg 226 BBL SLURRY (CLS G 50/50 POZ + 10% SALT + .005lbs/sx STATIC FREE + .2% R3 +0.5%bwocEC-1+ .002 GPS FP-6L + 2% BENTONITE + 58.9% FW / (5.94 gal/sx, 1.32 yield) / DROP TOP PLUG & DISPLACE W/ 132 BBLs H2O + ADDITIVES / PLUG DOWN @ 08:15 HOURS / FLOATS HELD W/ 2.0 BBLs H2O RETURNED TO INVENTORY/ GOOD CIRC THROUGH OUT / NO SPACER, NO CEMENT TO SURFACE, LIFT PRESSURE @ 2,380 PSI / BUMP PRESSURE TO 3,000 PSI / TOP OF TAIL CEMENT CALCULATED @ 3,720 ' / RIG DOWN CMT EQUIPMENT
	9:00 - 9:30	0.50	CSGPRO	12	C	P	8560	SET WELL HEAD PACK OFF W/ CAMERON

API Well Number: 43047528730000

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE				Spud Date: 8/19/2012				
Project: UTAH-UINTAH			Site: NBU 1022-12O PAD			Rig Name No: PROPETRO 12/12, PIONEER 54/54		
Event: DRILLING			Start Date: 8/2/2012		End Date: 8/9/2013			
Active Datum: RKB @5,250.00usft (above Mean Sea Level)			UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	9:30 - 11:00	1.50	CSGPRO	14	A	P	8560	NIPPLE DOWN BOPE , RIG RELEASE @ 11:00 8/9/2013 TO NBU 1922-N1CS-R

US ROCKIES REGION

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/7/2013 12:00AM	MESAVERDE/			6,448.0	6,451.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,743.0	6,744.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,750.0	6,751.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,770.0	6,771.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,791.0	6,792.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,802.0	6,803.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,815.0	6,816.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,833.0	6,834.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,854.0	6,855.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,948.0	6,949.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,967.0	6,968.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			6,990.0	6,991.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,018.0	7,019.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,028.0	7,029.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,115.0	7,116.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,136.0	7,137.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,148.0	7,149.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,202.0	7,204.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,248.0	7,250.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,392.0	7,394.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,474.0	7,476.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

RECEIVED: Nov. 21, 2013

US ROCKIES REGION

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/7/2013 12:00AM	MESAVERDE/			7,546.0	7,548.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,582.0	7,584.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,598.0	7,600.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,630.0	7,631.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,666.0	7,667.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,700.0	7,701.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,754.0	7,755.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,792.0	7,793.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,824.0	7,825.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,844.0	7,845.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,878.0	7,879.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,890.0	7,891.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,900.0	7,901.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,910.0	7,911.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,919.0	7,920.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,930.0	7,931.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,944.0	7,945.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			7,982.0	7,983.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			8,000.0	8,001.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			8,018.0	8,019.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
10/7/2013 12:00AM	MESAVERDE/			8,030.0	8,031.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

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US ROCKIES REGION

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/7/2013 12:00AM	MESAVERDE/			8,044.0	8,045.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,058.0	8,059.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,087.0	8,088.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,108.0	8,109.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,126.0	8,127.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,188.0	8,189.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,208.0	8,209.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,264.0	8,265.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,302.0	8,303.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,318.0	8,319.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,332.0	8,333.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,346.0	8,347.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,372.0	8,373.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,388.0	8,389.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,460.0	8,461.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
10/7/2013 12:00AM	MESAVERDE/			8,480.0	8,481.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

3 Plots

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US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE		Spud Date: 8/19/2012	
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD	Rig Name No:
Event: COMPLETION		Start Date: 9/15/2013	End Date: 10/23/2013
Active Datum: RKB @5,250.00usft (above Mean Sea Level)		UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/15/2013	-							
9/26/2013	8:00 - 9:00	1.00	SUBSPR	52	E	P		NO PRESSURE ON SURFACE CASING RU HOT OILER FILLED SURFACE WITH 3 BBLS H2O, PUMPED 40 BBLS H2O DOWN SURFAC @ 1-1.5 BPM 650 PSI, ISIP 550 BLED WELL DOWN INSTALLED POP OFF SWIFN
9/27/2013	10:00 - 15:00	5.00	SUBSPR	51	B	P		HELD SAFETY MEETING: CEMENT DUST RU SCHLUMBERGER, ESTABLISHED INJECTION RATE @ 3 BPM 700 PSI, PUMPED JOB AS BELOW PUMPED 10 BBLS FRESH WATER PUMPED 20 BBLS CCL H2O PUMPED 10 BBLS FRESH WATER PUMPED 20 BBLS ZONE LOCK PUMPED 10 BBLS FRESH WATER MIXED & PUMPED 375 SXC CLASS G CEMENT 12.5 PPG CEMENT THIXOTROPIC BLEND @ 3.0 BPM AVG PRESSURE 600 PSI, 132 BBLS SLURRY ISIP 581 PSI 1 MIN 5 PSI SWI RUN CBL ON 10/01/13 RU CUTTERS RAN CBL
10/1/2013	8:00 - 11:00	3.00	SUBSPR	34		P		RU CUTTERS RAN CBL
10/2/2013	10:00 - 11:00	1.00	SUBSPR	52	B	P		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 7000 PSI. HELD FOR 15 MIN LOST 50 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. PRESSURE TEST 8 5/8 X 4 1/2 TO 500 PSI HELD FOR 5 MIN LOST -0 PSI,BLED PSI OFF, REINSTALLED POP OFF SWIFN NO PRESSURE ON SURFACE CASING SURFACE CSG FULL
10/4/2013	8:00 - 9:00	1.00	SUBSPR	37		P		RU WL RIH ATTEMPT TO CORRALATE TOP SHORT JOINT NOT WHERE ITS SUPOSED TO BE BOTTOM SHORT WAS AFTER CORRALATING, WILL RUN GAMMA RAY TO CORRALATE
10/7/2013	7:00 - 7:15	0.25	FRAC	48		P		HSM-JSA

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE		Spud Date: 8/19/2012	
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD	Rig Name No:
Event: COMPLETION		Start Date: 9/15/2013	End Date: 10/23/2013
Active Datum: RKB @5,250.00usft (above Mean Sea Level)		UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 17:30	10.25	FRAC	36	H	P		<p>RIH W/ GAMMA RAY TO CORRELATE SHORT JOINTS, POOH, RIH PERF STG #1 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #1)WHP 725 PSI, BRK 4309 PSI @ 5 BPM. ISIP 2420 PSI, FG. 0.73 ISIP 2371 PSI, FG. 0.72, NPI -49 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #2 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #2)WHP 2145 PSI, BRK 2567 PSI @ 5.4 BPM. ISIP 2210 PSI, FG. 0.71 ISIP 2462 PSI, FG. 0.74, NPI 252 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #3 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #3)WHP 2175 PSI, BRK 2500 PSI @ 4.9 BPM. ISIP 2228 PSI, FG. 0.72 ISIP 2506 PSI, FG. 0.75, NPI 278 PSI, SWI, SDFN.</p>
10/8/2013	7:00 - 7:15	0.25	FRAC	48		P		HSM-JSA
	7:15 - 17:30	10.25	FRAC	36	H	P		<p>SET CBP & PERF STG #4 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #4)WHP 2028 PSI, BRK 2957 PSI @ 6.8 BPM. ISIP 2228 PSI, FG. 0.73 ISIP 2751 PSI, FG. 0.79, NPI 523 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #5 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #5)WHP 2160 PSI, BRK 5013 PSI @ 4.8 BPM. ISIP 2634 PSI, FG. 0.78 ISIP 1951 PSI, FG. 0.69, NPI -683 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #6 AS DESIGNED, SWI, SDFN.</p>
10/9/2013	7:00 - 7:15	0.25	FRAC	48		P		HSM-JSA

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE		Spud Date: 8/19/2012	
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD	Rig Name No:
Event: COMPLETION		Start Date: 9/15/2013	End Date: 10/23/2013
Active Datum: RKB @5,250.00usft (above Mean Sea Level)		UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 17:30	10.25	FRAC	36	H	P		<p>FRAC STG #6)WHP 1475 PSI, BRK 2962 PSI @ 3.3 BPM. ISIP 1554 PSI, FG. 0.64 ISIP 2030 PSI, FG. 0.71, NPI 476 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #7 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #7)WHP 1756 PSI, BRK 2721 PSI @ 4 BPM. ISIP 1934 PSI, FG. 0.7 ISIP 2269 PSI, FG. 0.75, NPI 335 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #8 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #8)WHP 1734 PSI, BRK 2757 PSI @ 3.8 BPM. ISIP 1835 PSI, FG. 0.7 ISIP 2590 PSI, FG. 0.81, NPI 755 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #9 AS DESIGNED, SWI, SDFN. HSM-JSA</p>
10/10/2013	7:00 - 7:15	0.25	FRAC	48		P		
	7:15 - 18:30	11.25	FRAC	36	H	P		<p>FRAC STG #9)WHP 1370 PSI, BRK 2272 PSI @ 3.9 BPM. ISIP 1805 PSI, FG. 0.7 ISIP 2116 PSI, FG. 0.75, NPI 311 PSI, X/O TO WL.</p> <p>SET CBP & PERF STG #10 AS DESIGNED, X/O TO FRAC.</p> <p>FRAC STG #10)WHP 600 PSI, BRK 2726 PSI @ 4 BPM. ISIP 819 PSI, FG. 0.57 ISIP 2101 PSI, FG. 0.77, NPI 1282 PSI, X/O TO WL.</p> <p>SET KILL PLUG @ 6372', SWI, RDMO WL & FRAC EQUIP.</p> <p>TOTAL CLN FLUID=13246 BBLS TOTAL SAND=273686 LBS</p>
10/22/2013	12:30 - 14:00	1.50	DRLOUT	30	A	P		5 OF 6, MOVED OVER & RIGGED UP, ND WH NU BOPS, RU FLOOR & TBG EQUIP.
	14:00 - 17:00	3.00	DRLOUT	31	I	P		TALLY & PU 37/8 BIT, POBS, 1.875 X/N 150 JTS 23/8 J-55, L-80 PUP JT, 49 JTS 23/8 L-80 TAG @ 6309' RU DRLG EQUIP FILL & TEST BOPS TO 3,000 PSI, PREP TO D/O IN AM SWI SDFN.
10/23/2013	7:00 - 7:30	0.50	DRLOUT	48		P		HSM, DRILLING OUT PLUGS & WATCHING PINCH POINTS.

Operation Summary Report

Well: NBU 1022-12N1BS-R ORANGE		Spud Date: 8/19/2012	
Project: UTAH-UINTAH		Site: NBU 1022-12O PAD	Rig Name No:
Event: COMPLETION		Start Date: 9/15/2013	End Date: 10/23/2013
Active Datum: RKB @5,250.00usft (above Mean Sea Level)		UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:30 - 13:00	5.50	DRLOUT	44	C	P		RIH
								C/O 10' SAND TAG 1ST PLUG @ 6372' DRL PLG IN 7 MIN, 100 PSI INCREASE RIH.
								C/O 30' SAND TAG 2ND PLUG @ 6841' DRL PLG IN 6 MIN, 300 PSI INCREASE RIH.
								C/O 25' SAND TAG 3RD PLUG @ 6885' DRL PLG IN 8 MIN, 500 PSI INCREASE RIH.
								C/O 35' SAND TAG 4TH PLUG @ 7179' DRL PLG IN 7 MIN, 500 PSI INCREASE RIH.
								C/O 15' SAND TAG 5TH PLUG @ 7424' DRL PLG IN 7 MIN, 300 PSI INCREASE RIH.
								C/O 20' SAND TAG 6TH PLUG @ 7620' DRL PLG IN 10 MIN, 400 PSI INCREASE RIH.
								C/O 20' SAND TAG 7TH PLUG @ 7868' DRL PLG IN 3 MIN, 400 PSI INCREASE RIH.
								C/O 25' SAND TAG 8TH PLUG @ 7972' DRL PLG IN 4 MIN, 200 PSI INCREASE RIH
								C/O 20' SAND TAG 9TH PLUG @ 8077' DRL PLG IN 7 MIN, 500 PSI INCREASE RIH
								C/O 25' SAND TAG 10TH PLUG @ 8292' DRL PLG IN 7 MIN, 600 PSI INCREASE RIH
								(ALL PLUGS & PBSD WERE OFF APROX 49+ DIFFERENT)
								C/O TO 8452 PBSD @ 8501' 49' DIFF FROM PROCEDURE. , CIRC CLN, RD SWIVEL, L/D 14 JTS, LAND TBG, ND BOPS NU WH, TEST FLOW LINE, TO 3,000 PSI, PUMPED OFF BIT, TURN WELL TO FB CREW. RIGGED DOWN.FINAL
								KB = 19'
								41/16 HANGER = .83' (
								SURFACE VALVE OPEN & LOCKED 104
								23/8 L-80 = 3303.26' SICP 2300
								FTP 100
								6' L-80 PUP JT = 6.13'
								150 JTS 23/8 J-55 = 4736.75'
								POBS W/ 1.875 X/N = 2.20'
								EOT @ 8068.17'
								TWTR 13,556 BBLS
								TWR 1,200 BBLS
								TWLTR 12,356 BBLS
								315 JTS HAULED OUT, 150 J-55, 165 L-80.

API Well Number: 43047528730000

US ROCKIES REGION

Operation Summary Report

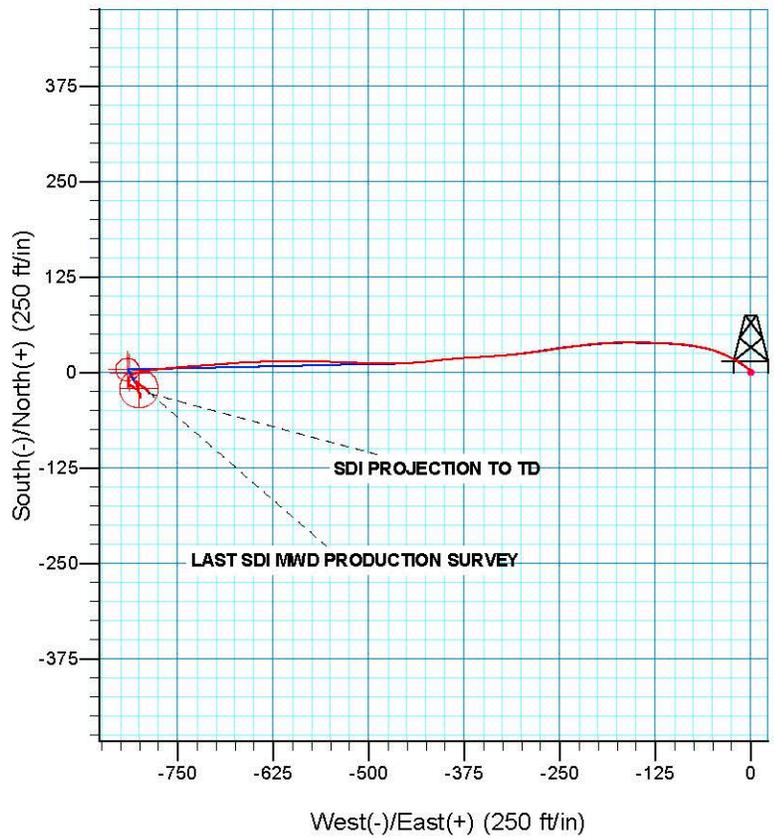
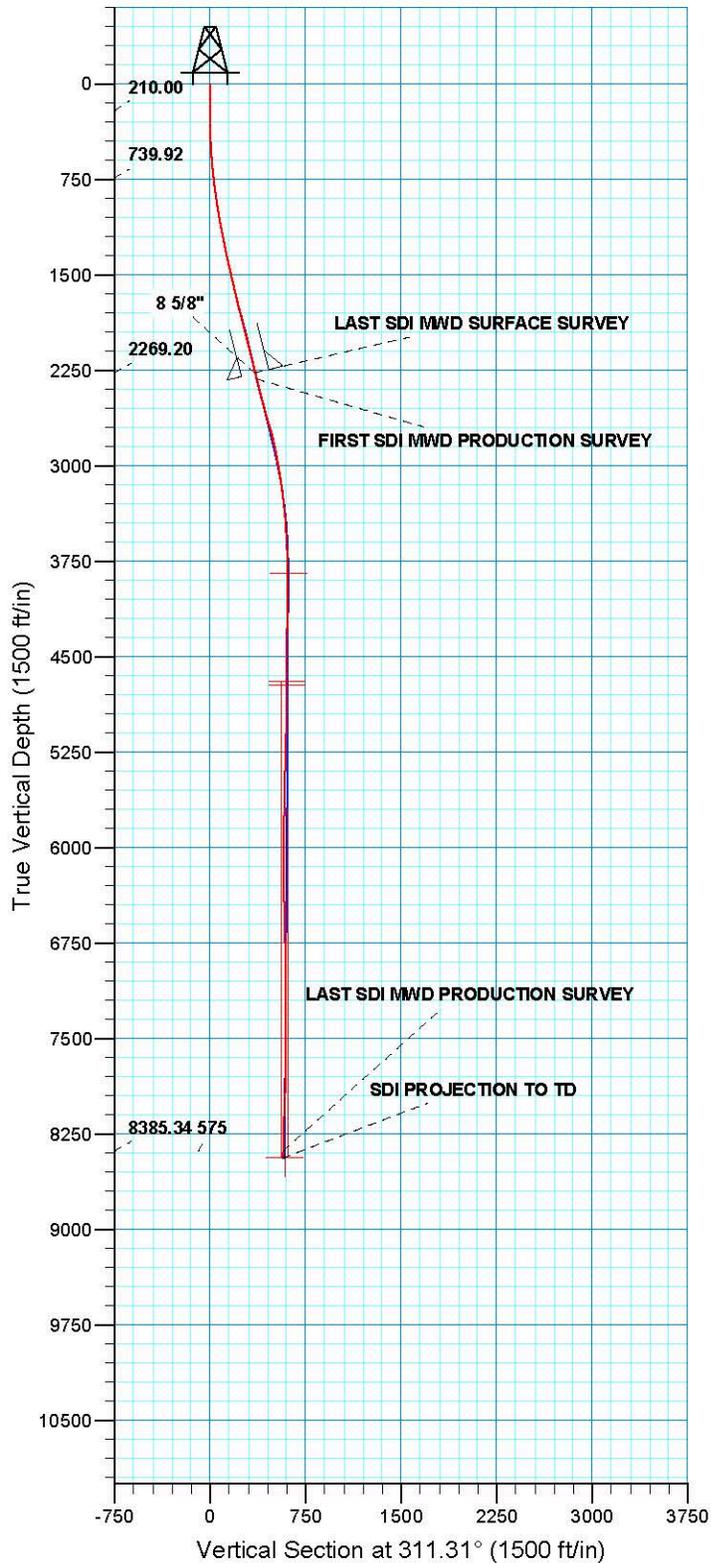
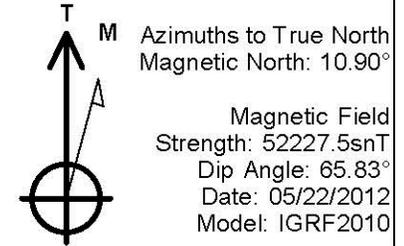
Well: NBU 1022-12N1BS-R ORANGE				Spud Date: 8/19/2012				
Project: UTAH-UINTAH			Site: NBU 1022-12O PAD			Rig Name No:		
Event: COMPLETION			Start Date: 9/15/2013		End Date: 10/23/2013			
Active Datum: RKB @5,250.00usft (above Mean Sea Level)			UWI: SW/SE/0/10/S/22/E/12/0/0/26/PM/S/1265/E/0/2358/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								254 LANDED
								61 TO RETURN, L-80



WELL DETAILS: NBU 1022-12N1BS-R

GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14515458.78	2092539.10	39.9597000	-109.3865990



PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SECTION 12 T10S R2E
System Datum: Mean Sea Level



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

NBU 1022-12O PAD

NBU 1022-12N1BS-R

OH

Design: OH

Standard Survey Report

26 September, 2013





Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Site:	NBU 1022-12O PAD	MD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Well:	NBU 1022-12N1BS-R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 1022-12O PAD, SECTION 12 T10S R22E				
Site Position:		Northing:	14,515,442.24 usft	Latitude:	39.9596540
From:	Lat/Long	Easting:	2,092,551.18 usft	Longitude:	-109.3865570
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.04 °

Well	NBU 1022-12N1BS-R, 1257 FSL 2352 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,515,458.79 usft	Latitude:	39.9597000
	+E/-W	0.00 ft	Easting:	2,092,539.10 usft	Longitude:	-109.3865990
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,231.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	05/22/12	10.90	65.83	52,228

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	311.31	

Survey Program	Date	09/26/13			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
15.00	741.00	Survey #1 SDI GYRO MWD (OH)	SDI Gyro MWD 104	SDI Gyro MWD Error Model Ver 1.0.4	
808.00	2,338.00	Survey #2 SDI MWD SURFACE (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,390.00	8,560.00	Survey #3 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210.00	0.26	90.88	210.00	-0.01	0.44	-0.34	0.13	0.13	0.00	
FIRST SDI MWD GYRO SURFACE SURVEY										
295.00	0.79	342.25	295.00	0.55	0.46	0.02	1.07	0.62	-127.80	
378.00	1.50	322.56	377.98	1.96	-0.38	1.58	0.97	0.86	-23.72	
468.00	2.82	313.86	467.91	4.43	-2.69	4.94	1.51	1.47	-9.67	
558.00	4.22	301.82	557.74	7.71	-7.10	10.42	1.75	1.56	-13.38	
648.00	5.37	303.75	647.43	11.79	-13.42	17.86	1.29	1.28	2.14	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Site:	NBU 1022-12O PAD	MD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Well:	NBU 1022-12N1BS-R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
741.00	6.60	300.94	739.92	16.96	-21.62	27.43	1.36	1.32	-3.02	
LAST SDI MWD GYRO SURFACE SURVEY										
808.00	7.65	296.43	806.40	20.92	-28.92	35.53	1.77	1.57	-6.73	
FIRST SDI MWD SURFACE SURVEY										
898.00	8.97	290.80	895.46	26.08	-40.84	47.89	1.72	1.47	-6.26	
988.00	10.15	285.25	984.21	30.66	-55.05	61.59	1.66	1.31	-6.17	
1,078.00	11.13	278.96	1,072.66	34.10	-71.28	76.05	1.69	1.09	-6.99	
1,168.00	12.84	275.51	1,160.70	36.41	-89.82	91.50	2.06	1.90	-3.83	
1,258.00	14.60	273.23	1,248.13	38.01	-111.10	108.54	2.05	1.96	-2.53	
1,348.00	16.36	271.38	1,334.86	38.95	-135.10	127.19	2.03	1.96	-2.06	
1,438.00	17.23	270.24	1,421.02	39.32	-161.10	146.96	1.03	0.97	-1.27	
1,528.00	17.67	266.63	1,506.88	38.57	-188.07	166.72	1.30	0.49	-4.01	
1,618.00	19.70	264.35	1,592.13	36.27	-216.80	186.79	2.40	2.26	-2.53	
1,708.00	20.40	260.24	1,676.68	32.12	-247.36	207.00	1.75	0.78	-4.57	
1,798.00	21.19	262.06	1,760.82	27.21	-278.93	227.48	1.13	0.88	2.02	
1,888.00	21.02	264.09	1,844.78	23.30	-311.09	249.06	0.83	-0.19	2.26	
1,978.00	20.58	267.10	1,928.92	20.84	-342.95	271.36	1.28	-0.49	3.34	
2,068.00	19.17	266.11	2,013.56	19.04	-373.49	293.11	1.61	-1.57	-1.10	
2,158.00	18.73	264.17	2,098.68	16.57	-402.61	313.35	0.85	-0.49	-2.16	
2,248.00	18.55	263.91	2,183.96	13.58	-431.22	332.87	0.22	-0.20	-0.29	
2,338.00	18.91	268.57	2,269.20	11.70	-460.03	353.27	1.71	0.40	5.18	
LAST SDI MWD SURFACE SURVEY										
2,390.00	19.52	271.51	2,318.30	11.72	-477.14	366.14	2.20	1.17	5.65	
FIRST SDI MWD PRODUCTION SURVEY										
2,485.00	18.73	271.25	2,408.06	12.47	-508.26	390.00	0.84	-0.83	-0.27	
2,579.00	19.35	273.27	2,496.91	13.69	-538.89	413.82	0.96	0.66	2.15	
2,674.00	19.43	270.98	2,586.53	14.85	-570.41	438.26	0.80	0.08	-2.41	
2,769.00	20.14	269.05	2,675.92	14.85	-602.56	462.41	1.02	0.75	-2.03	
2,864.00	18.29	267.82	2,765.62	14.01	-633.81	485.33	1.99	-1.95	-1.29	
2,959.00	17.76	268.17	2,855.96	12.98	-663.19	506.72	0.57	-0.56	0.37	
3,053.00	14.42	263.69	2,946.27	11.24	-689.16	525.08	3.79	-3.55	-4.77	
3,149.00	13.54	266.68	3,039.43	9.28	-712.26	541.13	1.19	-0.92	3.11	
3,244.00	12.31	266.77	3,132.02	8.06	-733.47	556.26	1.29	-1.29	0.09	
3,339.00	10.55	262.63	3,225.13	6.37	-752.21	569.23	2.04	-1.85	-4.36	
3,434.00	9.58	266.15	3,318.67	4.73	-768.72	580.54	1.21	-1.02	3.71	
3,529.00	7.39	261.76	3,412.62	3.32	-782.66	590.08	2.40	-2.31	-4.62	
3,624.00	5.63	260.35	3,507.01	1.66	-793.30	596.98	1.86	-1.85	-1.48	
3,717.00	4.40	258.59	3,599.65	0.19	-801.30	602.02	1.33	-1.32	-1.89	
3,811.00	3.08	244.44	3,693.45	-1.61	-807.11	605.19	1.70	-1.40	-15.05	
3,906.00	2.37	227.04	3,788.34	-4.05	-810.85	606.39	1.14	-0.75	-18.32	
4,001.00	0.88	242.42	3,883.30	-5.73	-812.93	606.85	1.62	-1.57	16.19	
4,096.00	1.14	207.00	3,978.29	-6.91	-814.01	606.88	0.70	0.27	-37.28	
4,186.00	0.44	150.05	4,068.28	-8.00	-814.24	606.33	1.08	-0.78	-63.28	
4,285.00	0.44	159.71	4,167.28	-8.69	-813.92	605.64	0.07	0.00	9.76	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Site:	NBU 1022-12O PAD	MD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Well:	NBU 1022-12N1BS-R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,378.00	0.62	189.60	4,260.27	-9.52	-813.88	605.06	0.35	0.19	32.14	
4,472.00	0.79	194.70	4,354.27	-10.65	-814.13	604.50	0.19	0.18	5.43	
4,567.00	0.79	199.88	4,449.26	-11.90	-814.52	603.97	0.08	0.00	5.45	
4,662.00	0.97	179.40	4,544.25	-13.32	-814.73	603.19	0.38	0.19	-21.56	
4,756.00	1.06	181.25	4,638.23	-14.98	-814.74	602.10	0.10	0.10	1.97	
4,851.00	1.06	178.87	4,733.22	-16.74	-814.75	600.94	0.05	0.00	-2.51	
4,946.00	0.62	72.97	4,828.21	-17.47	-814.24	600.08	1.44	-0.46	-111.47	
5,041.00	0.88	82.02	4,923.20	-17.22	-813.02	599.33	0.30	0.27	9.53	
5,137.00	0.70	93.62	5,019.19	-17.15	-811.71	598.39	0.25	-0.19	12.08	
5,231.00	0.97	110.85	5,113.18	-17.47	-810.39	597.19	0.39	0.29	18.33	
5,326.00	1.14	113.84	5,208.17	-18.14	-808.78	595.53	0.19	0.18	3.15	
5,420.00	1.34	125.94	5,302.15	-19.16	-807.03	593.55	0.35	0.21	12.87	
5,514.00	1.32	132.91	5,396.12	-20.54	-805.35	591.37	0.17	-0.02	7.41	
5,609.00	1.32	134.31	5,491.09	-22.05	-803.76	589.18	0.03	0.00	1.47	
5,702.00	1.58	140.20	5,584.06	-23.79	-802.18	586.85	0.32	0.28	6.33	
5,796.00	1.67	140.29	5,678.03	-25.83	-800.47	584.21	0.10	0.10	0.10	
5,891.00	0.88	159.89	5,773.00	-27.58	-799.34	582.21	0.94	-0.83	20.63	
5,986.00	0.88	167.01	5,867.99	-28.98	-798.92	580.97	0.12	0.00	7.49	
6,080.00	1.14	177.47	5,961.98	-30.62	-798.72	579.74	0.34	0.28	11.13	
6,175.00	1.23	176.94	6,056.96	-32.58	-798.62	578.37	0.10	0.09	-0.56	
6,270.00	0.35	267.82	6,151.95	-33.61	-798.86	577.87	1.35	-0.93	95.66	
6,365.00	0.88	335.14	6,246.94	-32.96	-799.45	578.75	0.85	0.56	70.86	
6,459.00	2.20	344.20	6,340.91	-30.57	-800.25	580.92	1.42	1.40	9.64	
6,554.00	2.02	358.35	6,435.84	-27.14	-800.79	583.59	0.58	-0.19	14.89	
6,649.00	1.58	3.09	6,530.80	-24.16	-800.77	585.55	0.49	-0.46	4.99	
6,742.00	1.41	350.53	6,623.77	-21.75	-800.89	587.23	0.40	-0.18	-13.51	
6,837.00	1.49	328.99	6,718.74	-19.54	-801.72	589.31	0.58	0.08	-22.67	
6,931.00	1.23	331.54	6,812.71	-17.60	-802.83	591.42	0.28	-0.28	2.71	
7,027.00	0.79	351.58	6,908.69	-16.04	-803.42	592.89	0.58	-0.46	20.88	
7,122.00	0.35	331.01	7,003.69	-15.14	-803.65	593.66	0.50	-0.46	-21.65	
7,217.00	0.26	284.08	7,098.69	-14.83	-804.00	594.13	0.27	-0.09	-49.40	
7,310.00	0.53	188.37	7,191.69	-15.21	-804.27	594.08	0.66	0.29	-102.91	
7,405.00	0.88	344.64	7,286.68	-14.94	-804.53	594.45	1.45	0.37	164.49	
7,500.00	0.88	345.34	7,381.67	-13.53	-804.91	595.67	0.01	0.00	0.74	
7,595.00	0.44	1.16	7,476.67	-12.46	-805.08	596.51	0.50	-0.46	16.65	
7,690.00	0.44	78.59	7,571.66	-12.02	-804.72	596.52	0.58	0.00	81.51	
7,785.00	0.88	107.16	7,666.66	-12.17	-803.66	595.63	0.56	0.46	30.07	
7,879.00	1.14	160.33	7,760.65	-13.26	-802.66	594.16	0.99	0.28	56.56	
7,974.00	1.58	133.35	7,855.62	-15.05	-801.39	592.02	0.81	0.46	-28.40	
8,069.00	1.76	125.88	7,950.58	-16.80	-799.25	589.26	0.30	0.19	-7.86	
8,163.00	2.02	116.38	8,044.53	-18.39	-796.60	586.22	0.43	0.28	-10.11	
8,258.00	1.93	121.83	8,139.47	-19.97	-793.74	583.03	0.22	-0.09	5.74	
8,351.00	1.76	130.62	8,232.42	-21.73	-791.33	580.05	0.35	-0.18	9.45	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12N1BS-R
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Site:	NBU 1022-12O PAD	MD Reference:	GL 5231 & KB 19 @ 5250.00ft (PIONEER 54)
Well:	NBU 1022-12N1BS-R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (%/100ft)	Build Rate (%/100ft)	Turn Rate (%/100ft)
8,446.00	1.93	138.01	8,327.37	-23.87	-789.15	577.01	0.31	0.18	7.78
8,504.00	1.93	163.05	8,385.34	-25.53	-788.21	575.21	1.44	0.00	43.17
LAST SDI MWD PRODUCTION SURVEY									
8,560.00	1.93	163.05	8,441.31	-27.33	-787.66	573.60	0.00	0.00	0.00
SDI PROJECTION TO TD									

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
DTGT_NBU 1022-N1BS - hit/miss target - Shape	0.00	0.00	3,852.25	3.88	-815.50	14,515,447.92	2,091,723.66	39.9597107	-109.3895085
- actual wellpath misses target center by 9.77ft at 3969.84ft MD (3852.15 TVD, -5.40 N, -812.42 E)									
- Circle (radius 15.00)									
TOC @ 4697.00 (NBU 1 - actual wellpath misses target center by 15.73ft at 4814.49ft MD (4696.71 TVD, -16.06 N, -814.75 E)	0.00	0.00	4,697.00	-0.44	-812.91	14,515,443.64	2,091,726.34	39.9596988	-109.3894993
- Point									
TOC @ 4705.00 NBU 1C - actual wellpath misses target center by 15.61ft at 4837.50ft MD (4719.71 TVD, -16.49 N, -814.75 E)	0.00	0.00	4,720.00	-1.03	-812.55	14,515,443.06	2,091,726.70	39.9596972	-109.3894980
- Point									
PBHL_NBU 1022-N1BS - actual wellpath misses target center by 14.28ft at 8560.00ft MD (8441.31 TVD, -27.33 N, -787.66 E)	0.00	0.00	8,442.00	-21.12	-800.50	14,515,423.20	2,091,739.12	39.9596420	-109.3894550
- Circle (radius 25.00)									

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
741.00	739.92	16.96	-21.62	LAST SDI MWD GYRO SURFACE SURVEY
808.00	806.40	20.92	-28.92	FIRST SDI MWD SURFACE SURVEY
2,338.00	2,269.20	11.70	-460.03	LAST SDI MWD SURFACE SURVEY
2,390.00	2,318.30	11.72	-477.14	FIRST SDI MWD PRODUCTION SURVEY
8,504.00	8,385.34	-25.53	-788.21	LAST SDI MWD PRODUCTION SURVEY
8,560.00	8,441.31	-27.33	-787.66	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____