

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 1022-12P4CS
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) UT ST UO 01997-A ST	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	1115 FSL 442 FEL	SESE	12	10.0 S	22.0 E	S
Top of Uppermost Producing Zone	246 FSL 491 FEL	SESE	12	10.0 S	22.0 E	S
At Total Depth	246 FSL 491 FEL	SESE	12	10.0 S	22.0 E	S

21. COUNTY UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet) 246	23. NUMBER OF ACRES IN DRILLING UNIT 1674
24. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 836	25. PROPOSED DEPTH MD: 8492 TVD: 8359	
26. ELEVATION - GROUND LEVEL 5264	27. BOND NUMBER 22013542	28. 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 - 2150	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 - 8492	11.6	I-80 LT&C	12.5	Premium Lite High Strength	270	3.38	11.0
							50/50 Poz	1170	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 Gina Becker	TITLE Regulatory Analyst II	PHONE 720 929-6086
SIGNATURE	DATE 09/14/2011	EMAIL gina.becker@anadarko.com
API NUMBER ASSIGNED 43047519470000	APPROVAL  Permit Manager	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 1022-12P4CS**

Surface: 1115 FSL / 442 FEL SESE
 BHL: 246 FSL / 491 FEL SESE

Section 12 T10S R22E

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

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	1013	
Birds Nest	1327	Water
Mahogany	1701	Water
Wasatch	4063	Gas
Mesaverde	6182	Gas
MVU2	7173	Gas
MVL1	7724	Gas
TVD	8359	
TD	8492	

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 8359' TVD, approximately equals
5,350 psi 0.64 psi/ft = actual bottomhole gradient

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

Maximum anticipated surface pressure equals approximately 3,499 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 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.

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

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,150	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						2.52	1.87	6.60	N/A
PRODUCTION	4-1/2"	0 to 8,492	11.60	I-80	LTC/BTC	7,780	6,350	279,000	367,000
						1.11	1.17	3.50	4.61

Surface Casing:

(Burst Assumptions: TD = 12.5 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) 0.64 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 1,650'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	150	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 3,562'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	270	20%	11.00	3.38
	TAIL 4,930'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,170	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. No centralizers will be used.

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.

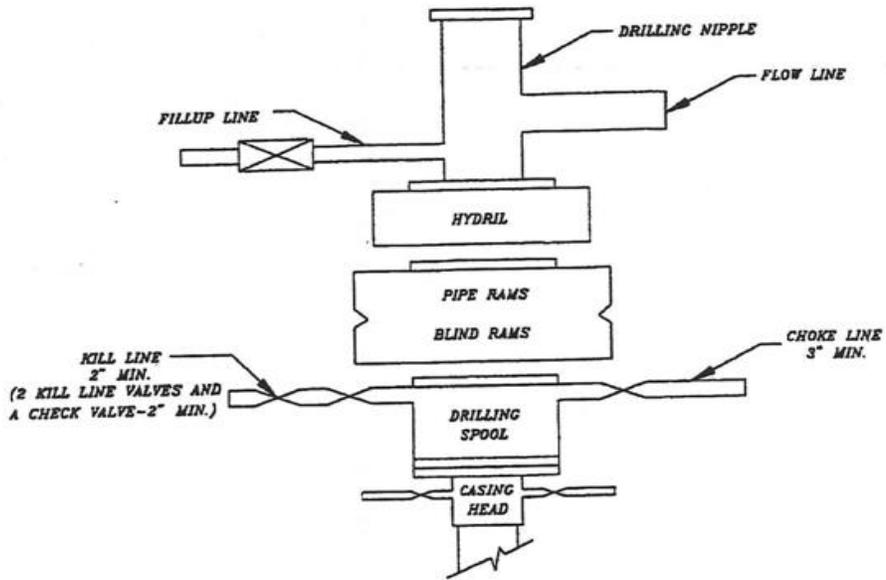
DRILLING ENGINEER: _____
Nick Spence / Danny Showers

DATE: _____

DRILLING SUPERINTENDENT: _____
Kenny Gathings / Lovel Young

DATE: _____

EXHIBIT A
NBU 1022-12P4CS



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 1022-12P4CS (Surface Position)
NAD 83 LATITUDE = 39.959237° (39° 57' 33.254")
LONGITUDE = 109.380446° (109° 22' 49.605")
NAD 27 LATITUDE = 39.959271° (39° 57' 33.377")
LONGITUDE = 109.379766° (109° 22' 47.157")

NBU 1022-12P4CS (Bottom Hole)
NAD 83 LATITUDE = 39.956853° (39° 57' 24.672")
LONGITUDE = 109.380630° (109° 22' 50.269")
NAD 27 LATITUDE = 39.956887° (39° 57' 24.795")
LONGITUDE = 109.379951° (109° 22' 47.822")

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

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

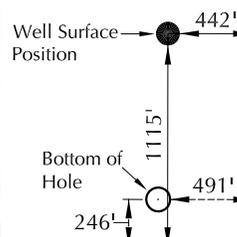
Not Monumented

12

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

WELL LOCATION: NBU 1022-12P4CS

ELEV. UNGRADED GROUND = 5263.7'



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.)

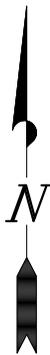
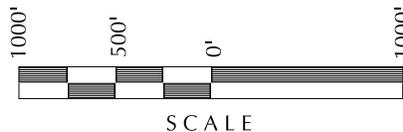
Not Monumented

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

NOTES:

▲ = Section Corners Located

- Well footages are measured at right angles to the Section Lines.
- G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
- The Bottom of hole bears S03°21'21"W 870.17' from the Surface Position.
- Bearings are based on Global Positioning Satellite observations.
- 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. SLOUGH
PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH 2-8-11

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

WELL PAD: NBU 1022-12P

**NBU 1022-12P4CS
WELL PLAT**

**246' FSL, 491' FEL (Bottom Hole)
SE ¼ SE ¼ OF 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

(435) 789-1365

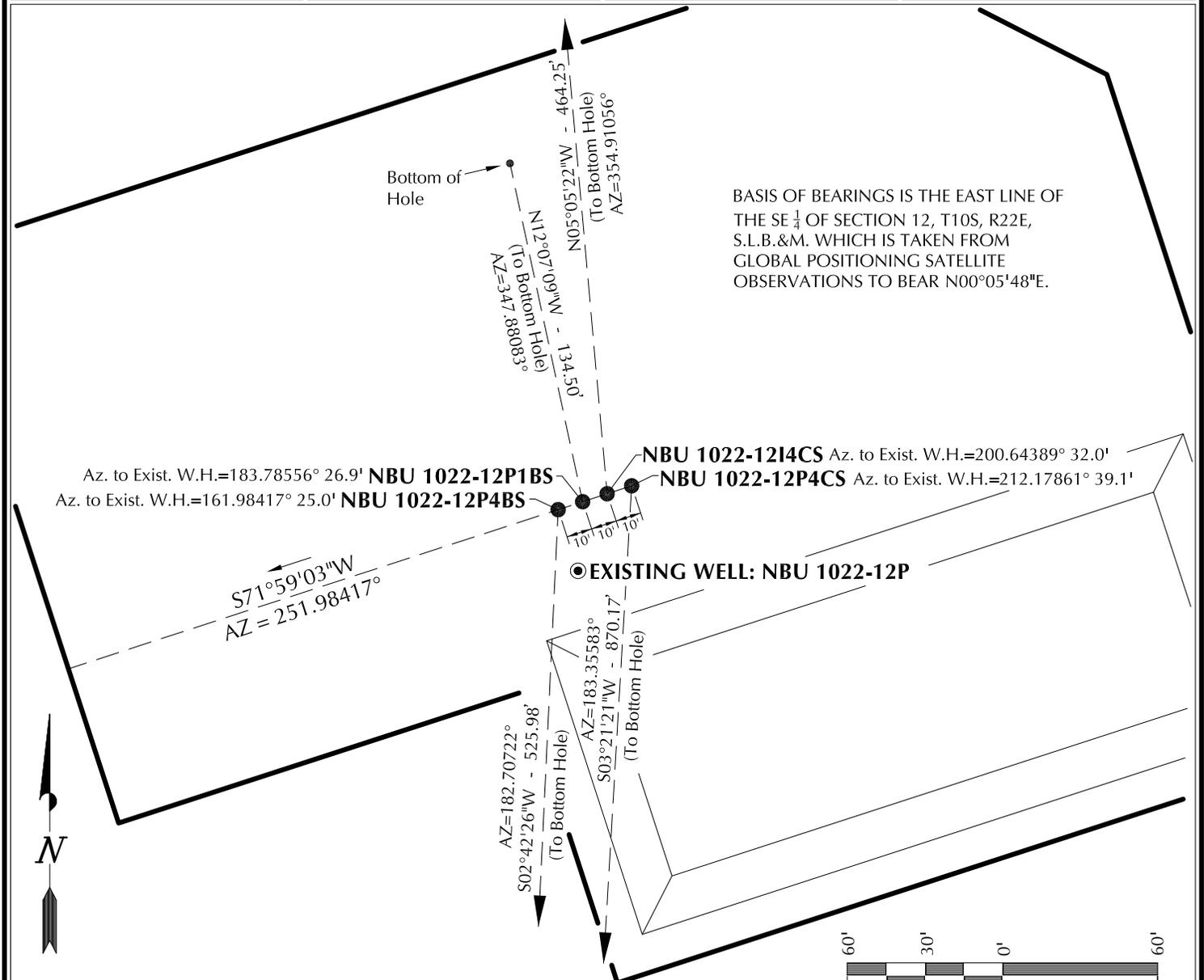
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 01-18-11	SURVEYED BY: R.Y.	SHEET NO: 1
DATE DRAWN: 02-01-11	DRAWN BY: M.W.W.	
SCALE: 1" = 1000'		1 OF 16

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 1022-12P4CS	39°57'33.254"	109°22'49.605"	39°57'33.377"	109°22'47.152"	1115' FSL 442' FEL	39°57'24.672"	109°22'50.269"	39°57'24.795"	109°22'47.822"	246' FSL 491' FEL
NBU 1022-1214CS	39°57'33.224"	109°22'49.727"	39°57'33.346"	109°22'47.280"	1112' FSL 451' FEL	39°57'37.793"	109°22'50.251"	39°57'37.915"	109°22'47.803"	1574' FSL 493' FEL
NBU 1022-12P1BS	39°57'33.193"	109°22'49.849"	39°57'33.316"	109°22'47.402"	1109' FSL 461' FEL	39°57'34.493"	109°22'50.210"	39°57'34.615"	109°22'47.763"	1240' FSL 489' FEL
NBU 1022-12P4BS	39°57'33.163"	109°22'49.972"	39°57'33.285"	109°22'47.524"	1105' FSL 470' FEL	39°57'27.972"	109°22'50.297"	39°57'28.095"	109°22'47.849"	580' FSL 494' FEL
NBU 1022-12P	39°57'32.928"	109°22'49.873"	39°57'33.050"	109°22'47.425"	1082' FSL 462' FEL	39°57'32.928"	109°22'49.873"	39°57'33.050"	109°22'47.425"	

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 1022-12P4CS	-868.7'	-50.9'	NBU 1022-1214CS	462.4'	-41.2'	NBU 1022-12P1BS	131.5'	-28.2'	NBU 1022-12P4BS	-525.4'	-24.8'



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

WELL PAD - NBU 1022-12P

WELL PAD INTERFERENCE PLAT
WELLS - NBU 1022-12P4CS, NBU 1022-1214CS,
NBU 1022-12P1BS & NBU 1022-12P4BS
LOCATED IN SECTION 12, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.

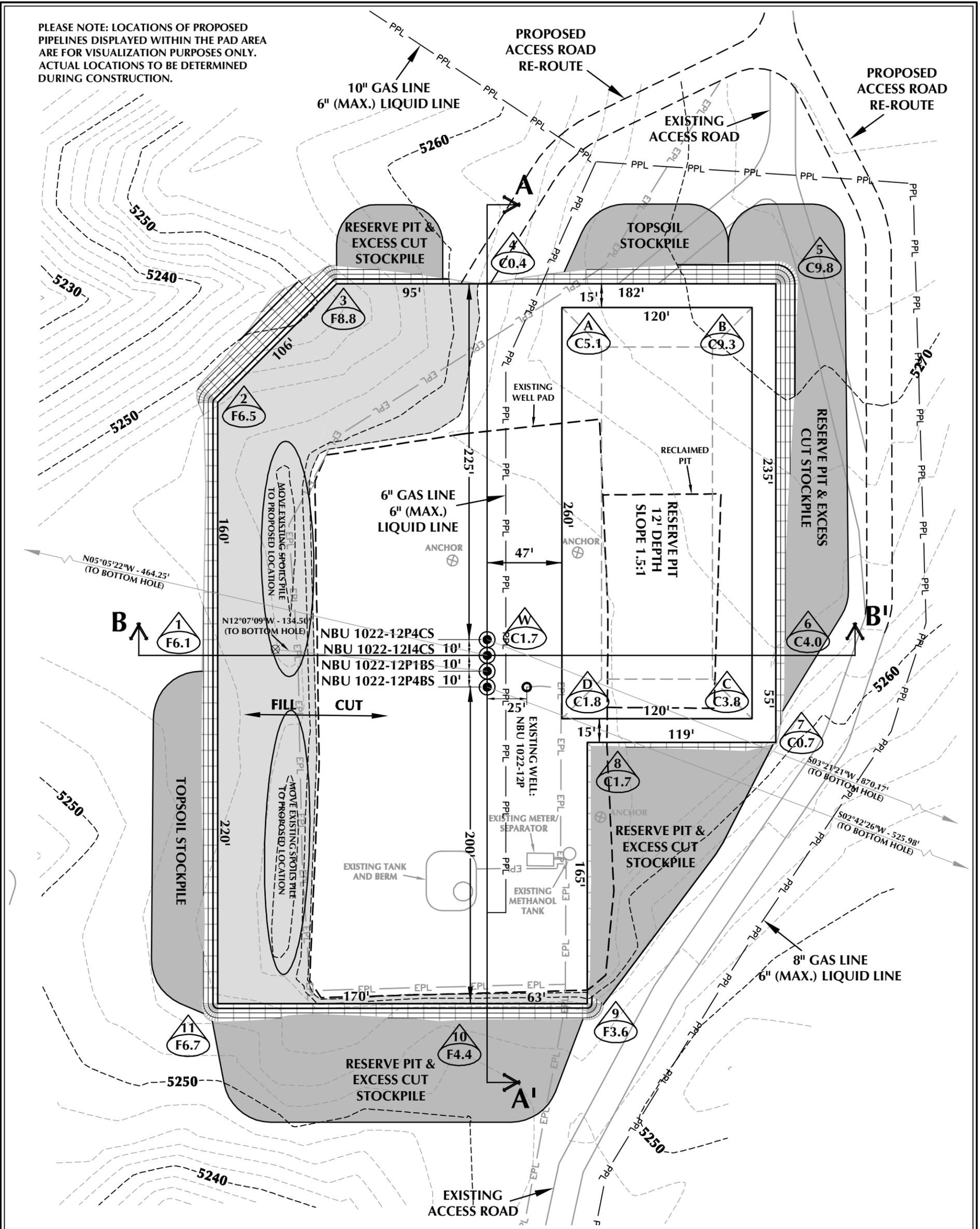


609 CONSULTING, LLC
2155 North Main Street
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

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

DATE SURVEYED: 01-18-11	SURVEYED BY: R.Y.	SHEET NO: 5 5 OF 16
DATE DRAWN: 02-01-11	DRAWN BY: M.W.W.	
SCALE: 1" = 60'		

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



WELL PAD - NBU 1022-12P DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5263.7'
 FINISHED GRADE ELEVATION = 5262.0'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.48 ACRES
 TOTAL DAMAGE AREA = 6.28 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD - NBU 1022-12P

WELL PAD - LOCATION LAYOUT
 NBU 1022-12P4CS, NBU 1022-12I4CS,
 NBU 1022-12P1BS & NBU 1022-12P4BS
 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

WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 9,978 C.Y.
 TOTAL FILL FOR WELL PAD = 7,905 C.Y.
 TOPSOIL @ 6" DEPTH = 1,643 C.Y.
 EXCESS MATERIAL = 2,073 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT
 +/- 11,020 C.Y.
 RESERVE PIT CAPACITY (2' OF FREEBOARD)
 +/- 42,290 BARRELS

WELL PAD LEGEND

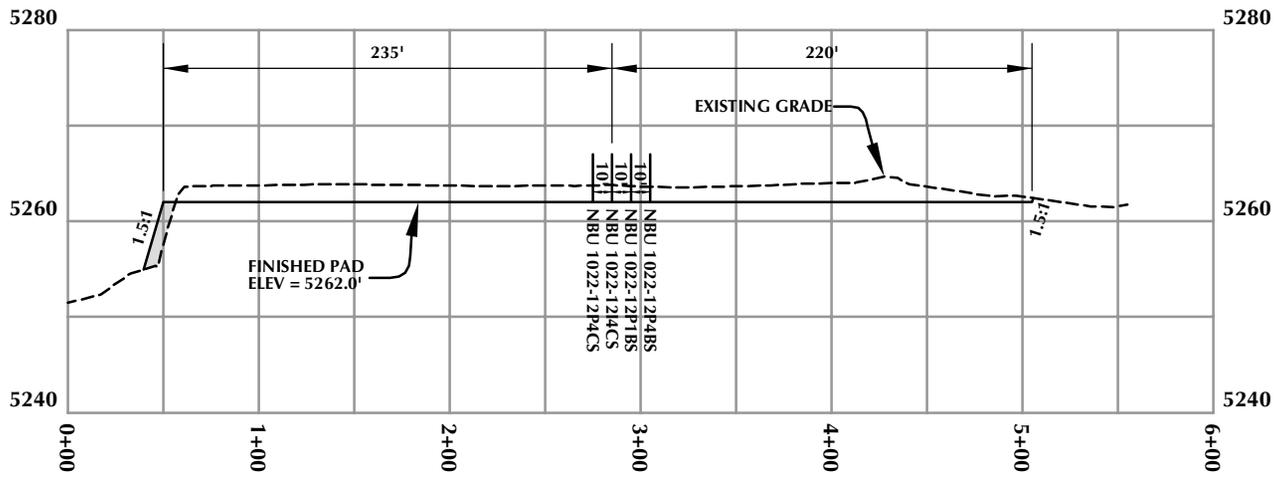
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PROPOSED PIPELINE
- EXISTING PIPELINE



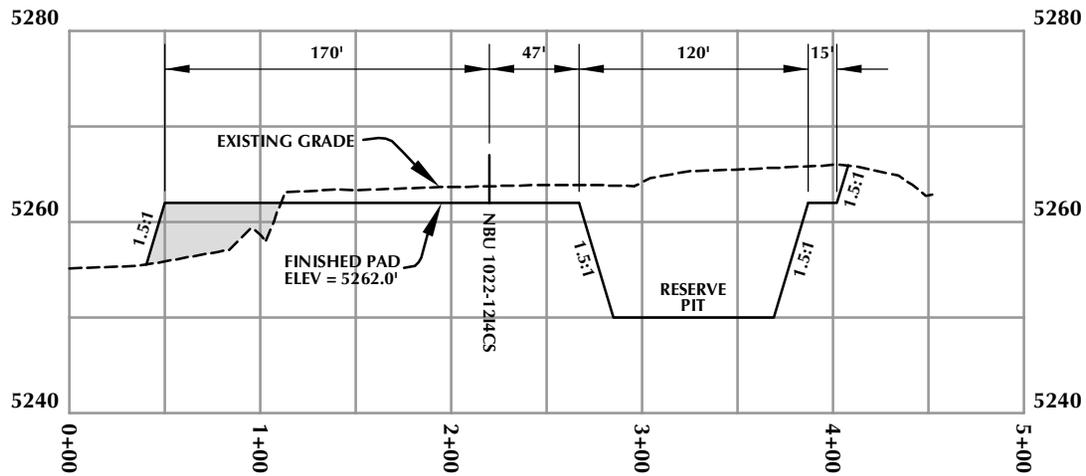
HORIZONTAL 0 30' 60' 1" = 60'
 2' CONTOURS

SCALE: 1"=60' DATE: 3/8/11 SHEET NO:
 REVISED: TAR 4/15/11 **6** 6 OF 16

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



CROSS SECTION A-A'



CROSS SECTION B-B'

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

WELL PAD - NBU 1022-12P

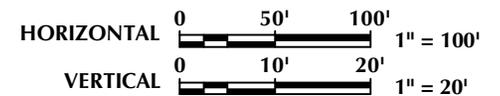
WELL PAD - CROSS SECTIONS
NBU 1022-12P4CS, NBU 1022-12I4CS,
NBU 1022-12P1BS & NBU 1022-12P4BS
LOCATED IN SECTION 12, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



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

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

(435) 789-1365



Scale: 1"=100'

Date: 3/8/11

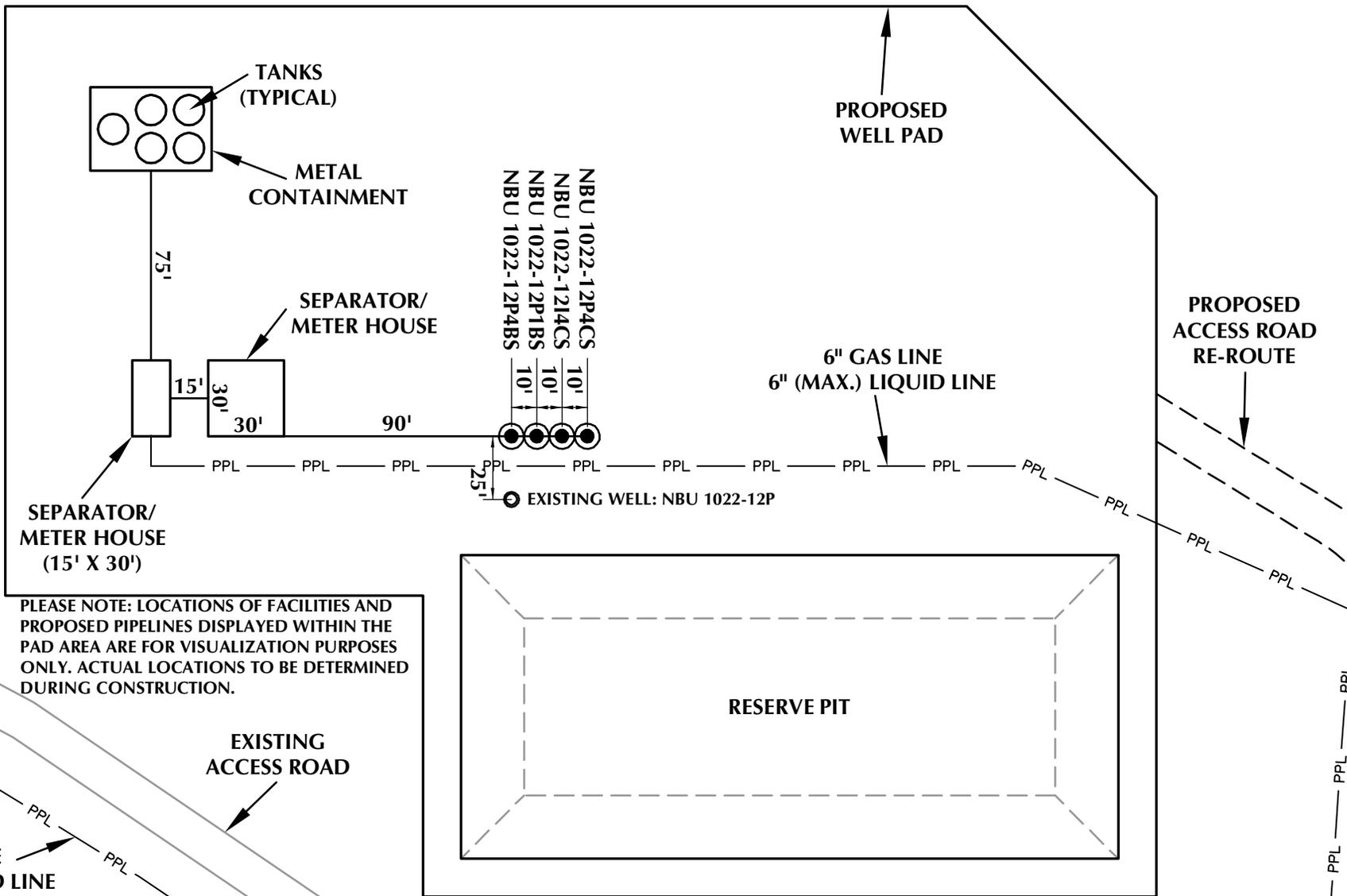
SHEET NO:

REVISED:

7

7 OF 16

RECEIVED: September 14, 2011



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 1022-12P

WELL PAD - FACILITIES DIAGRAM
NBU 1022-12P4CS, NBU 1022-12I4CS,
NBU 1022-12P1BS & NBU 1022-12P4BS
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 0 30' 60' 1" = 60'

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

(435) 789-1365

Scale: 1"=60'

Date: 3/8/11

SHEET NO:

REVISED:

8

8 OF 16

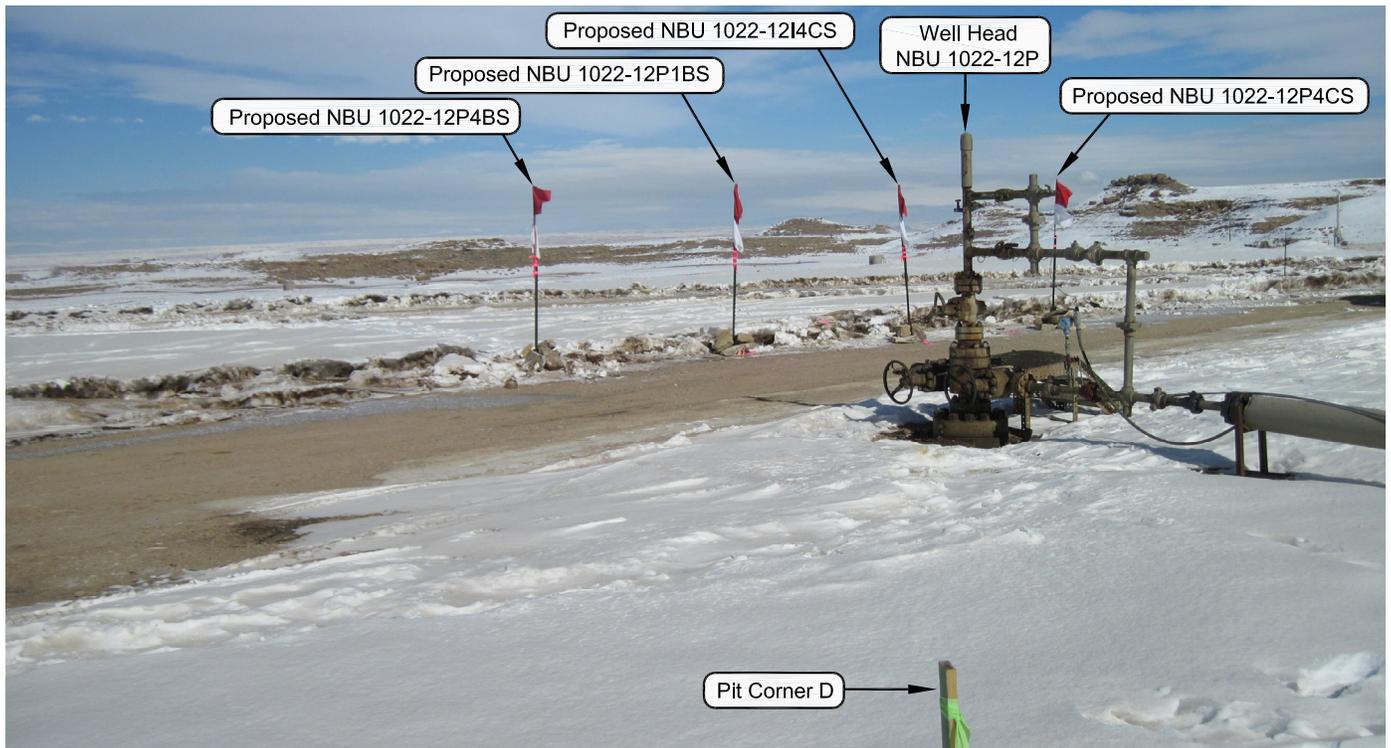


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHWESTERLY

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

WELL PAD - NBU 1022-12P

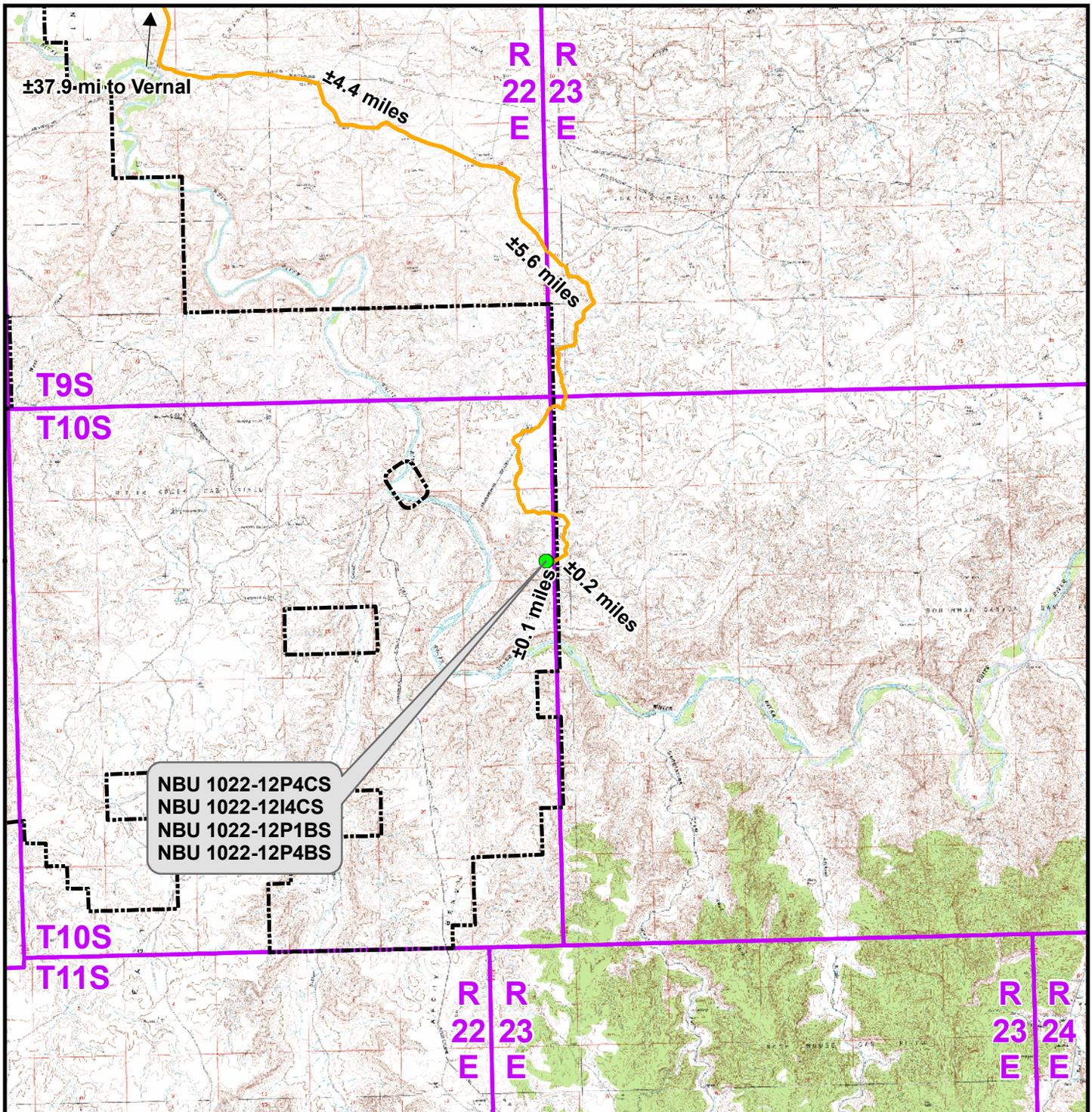
LOCATION PHOTOS
 NBU 1022-12P4CS, NBU 1022-12I4CS,
 NBU 1022-12P1BS & NBU 1022-12P4BS
 LOCATED IN SECTION 12, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH.



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: 01-18-11	PHOTOS TAKEN BY: R.Y.	SHEET NO: 9 9 OF 16
DATE DRAWN: 02-01-11	DRAWN BY: M.W.W.	
Date Last Revised:		



Legend

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

Distance From Well Pad - NBU 1022-12P To Unit Boundary: ±442ft

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

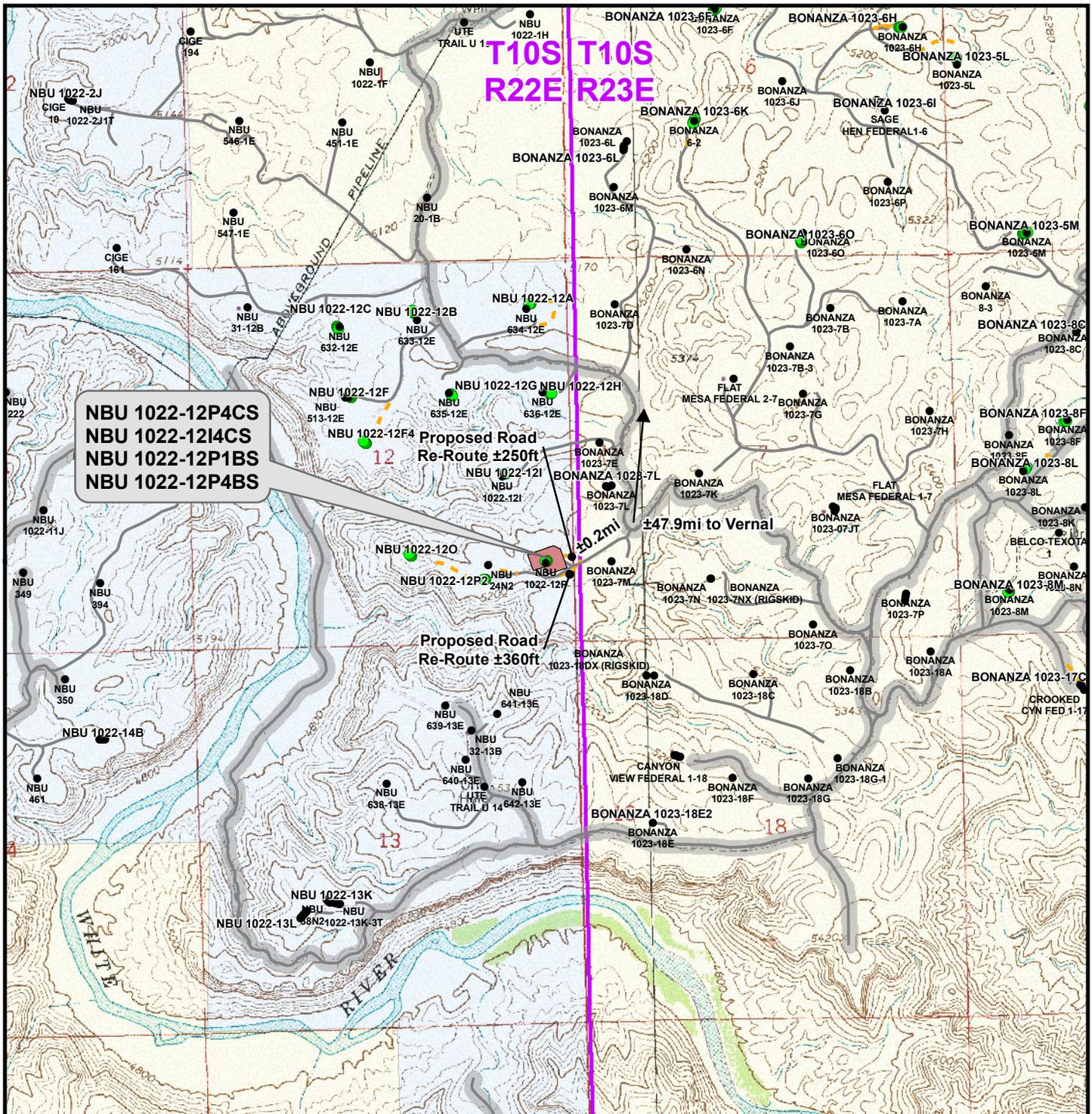
WELL PAD - NBU 1022-12P

TOPO A
 NBU 1022-12P4CS, NBU 1022-12I4CS,
 NBU 1022-12P1BS & NBU 1022-12P4BS
 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: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	10
Revised:	Date:	



**NBU 1022-12P4CS
NBU 1022-12I4CS
NBU 1022-12P1BS
NBU 1022-12P4BS**

**Proposed Road
Re-Route ±250ft**

**Proposed Road
Re-Route ±360ft**

Legend

● Well - Proposed	 Well Pad	 Road - Proposed	 County Road	 Bureau of Land Management	 State
● Well - Existing	 Road - Existing	 Indian Reservation	 Private		

Total Proposed Road Re-Route Length: ±610ft

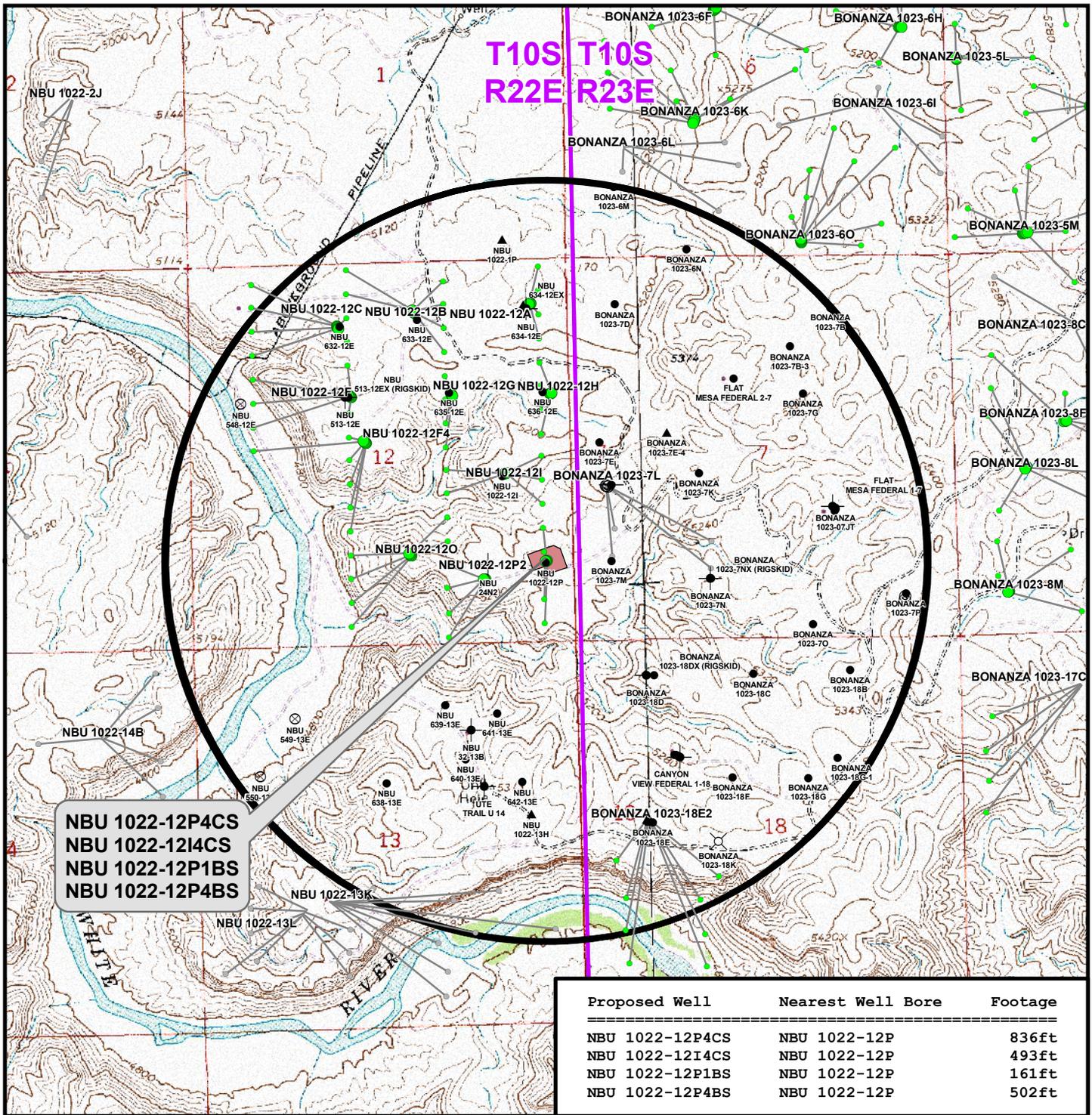
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12P

TOPO B
NBU 1022-12P4CS, NBU 1022-12I4CS,
NBU 1022-12P1BS & NBU 1022-12P4BS
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: 11
Drawn: TL	Date: 8 Mar 2011	11 of 16
Revised:	Date:	



Proposed Well	Nearest Well Bore	Footage
NBU 1022-12P4CS	NBU 1022-12P	836ft
NBU 1022-12I4CS	NBU 1022-12P	493ft
NBU 1022-12P1BS	NBU 1022-12P	161ft
NBU 1022-12P4BS	NBU 1022-12P	502ft

Legend

- Well - Proposed
- Bottom Hole - Proposed
- Bottom Hole - Existing
- Well Pad
- Well - 1 Mile Radius

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

- Producing
- Temporarily-Abandoned
- Active
- Shut-In
- Spudded (Drilling commenced; Not yet completed)
- Plugged and Abandoned
- Approved permit (APD); not yet spudded
- Location Abandoned
- New Permit (Not yet approved or drilled)
- Dry hole marker, buried
- Inactive
- Returned APD (Unapproved)
- Drilling Operations Suspended

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

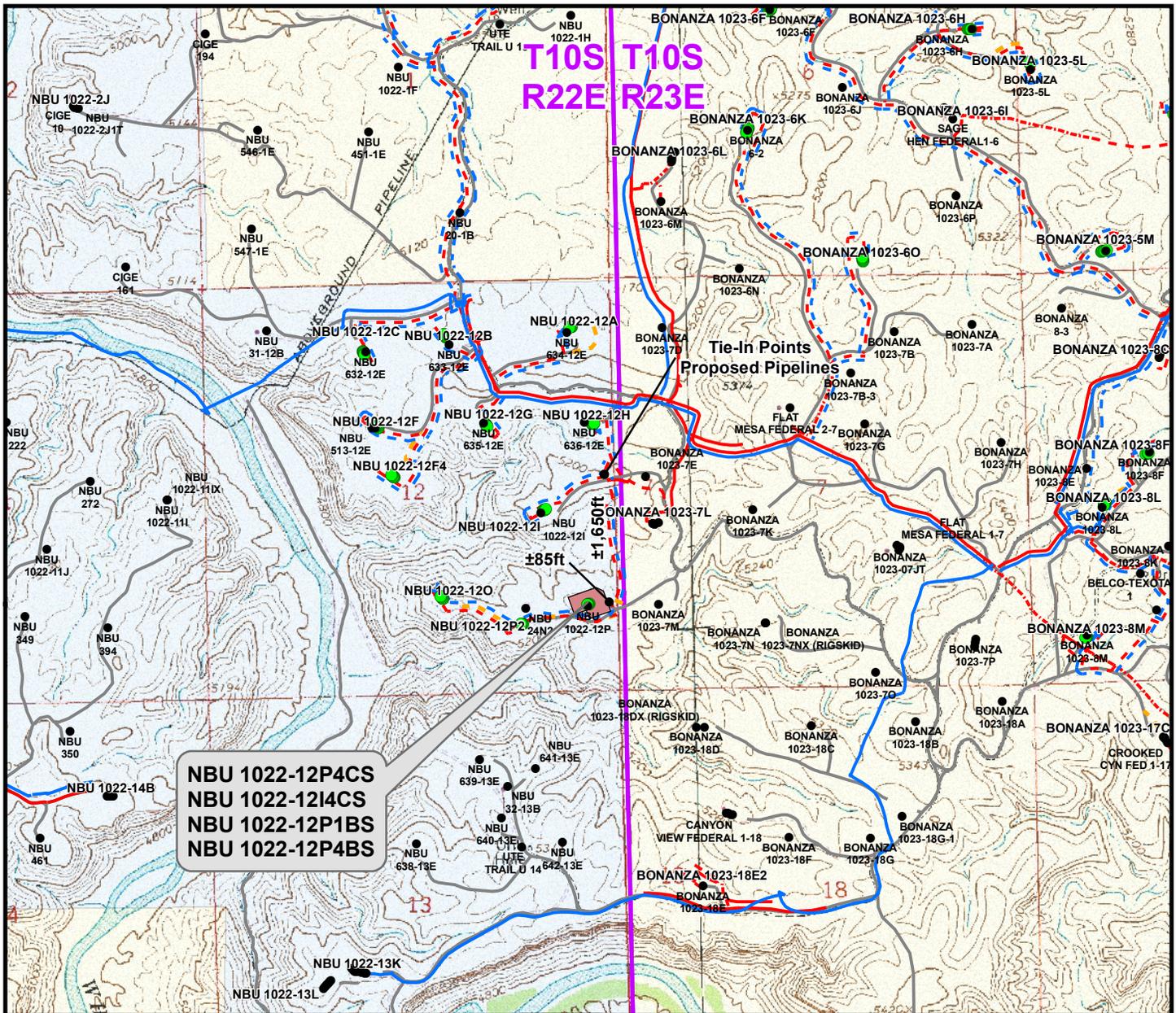
WELL PAD - NBU 1022-12P

TOPO C
NBU 1022-12P4CS, NBU 1022-12I4CS,
NBU 1022-12P1BS & NBU 1022-12P4BS
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" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	12
Revised:	Date:	



Proposed Liquid Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±430ft
Proposed 6" (Max.) (Edge of Pad to 12P2 Intersection)	±85ft
Proposed 6" (Max.) (12P2 Intersection to 12I Intersection)	±1,650ft
TOTAL PROPOSED LIQUID PIPELINE =	±2,165ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±430ft
Proposed 6" (Edge of Pad to 12P2 Intersection)	±85ft
Proposed 10" (12P2 Intersection to 12I Intersection)	±1,650ft
TOTAL PROPOSED GAS PIPELINE =	±2,165ft

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

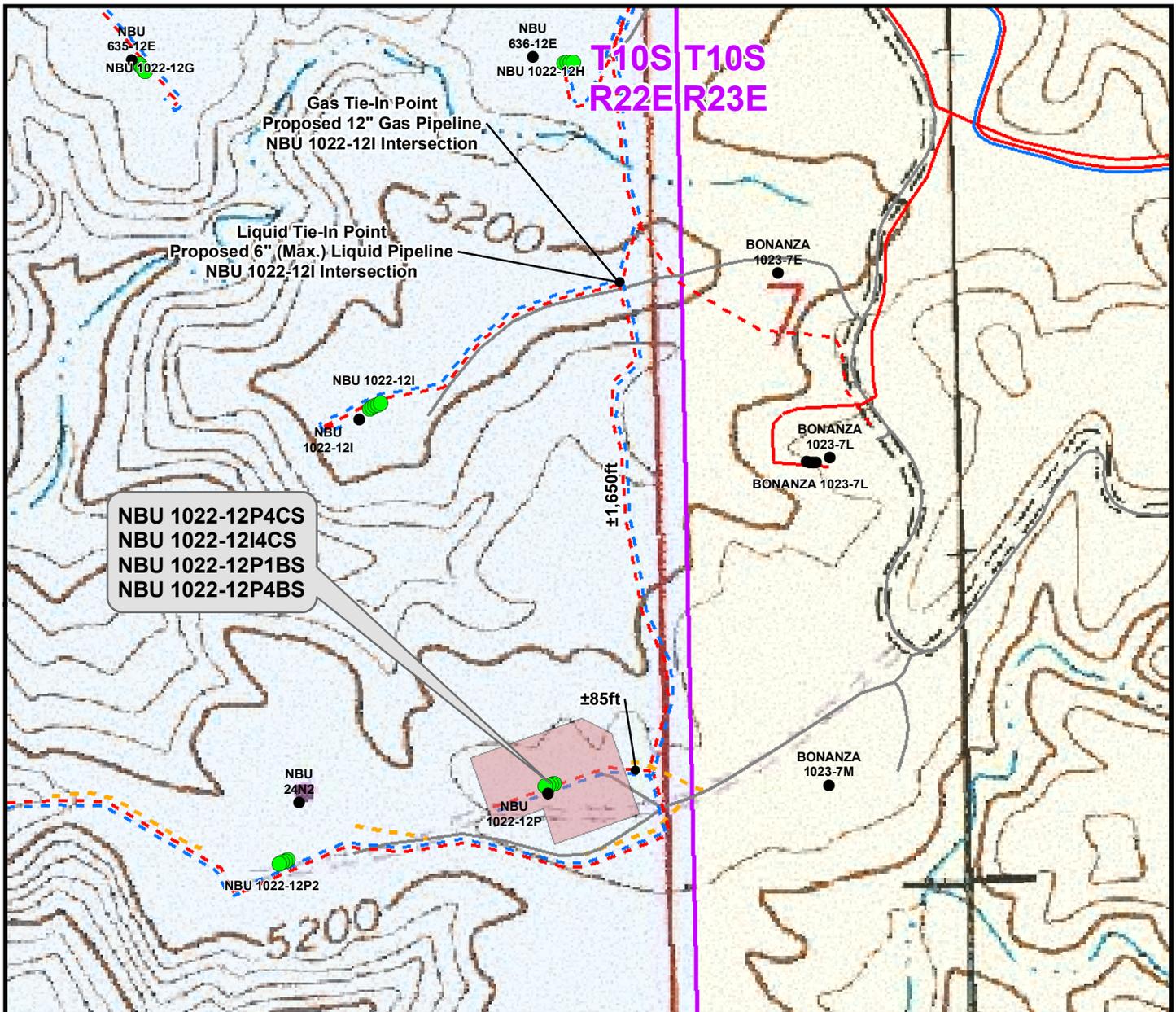
Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12P

TOPO D
 NBU 1022-12P4CS, NBU 1022-12I4CS,
 NBU 1022-12P1BS & NBU 1022-12P4BS
 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 13 of 16
Revised:	Date:	



Proposed Liquid Pipeline	Length	Proposed Gas Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±430ft	Proposed 6" (Meter House to Edge of Pad)	±430ft
Proposed 6" (Max.) (Edge of Pad to 12P2 Intersection)	±85ft	Proposed 6" (Edge of Pad to 12P2 Intersection)	±85ft
Proposed 6" (Max.) (12P2 Intersection to 12I Intersection)	±1,650ft	Proposed 10" (12P2 Intersection to 12I Intersection)	±1,650ft
TOTAL PROPOSED LIQUID PIPELINE =	±2,165ft	TOTAL PROPOSED GAS PIPELINE =	±2,165ft

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

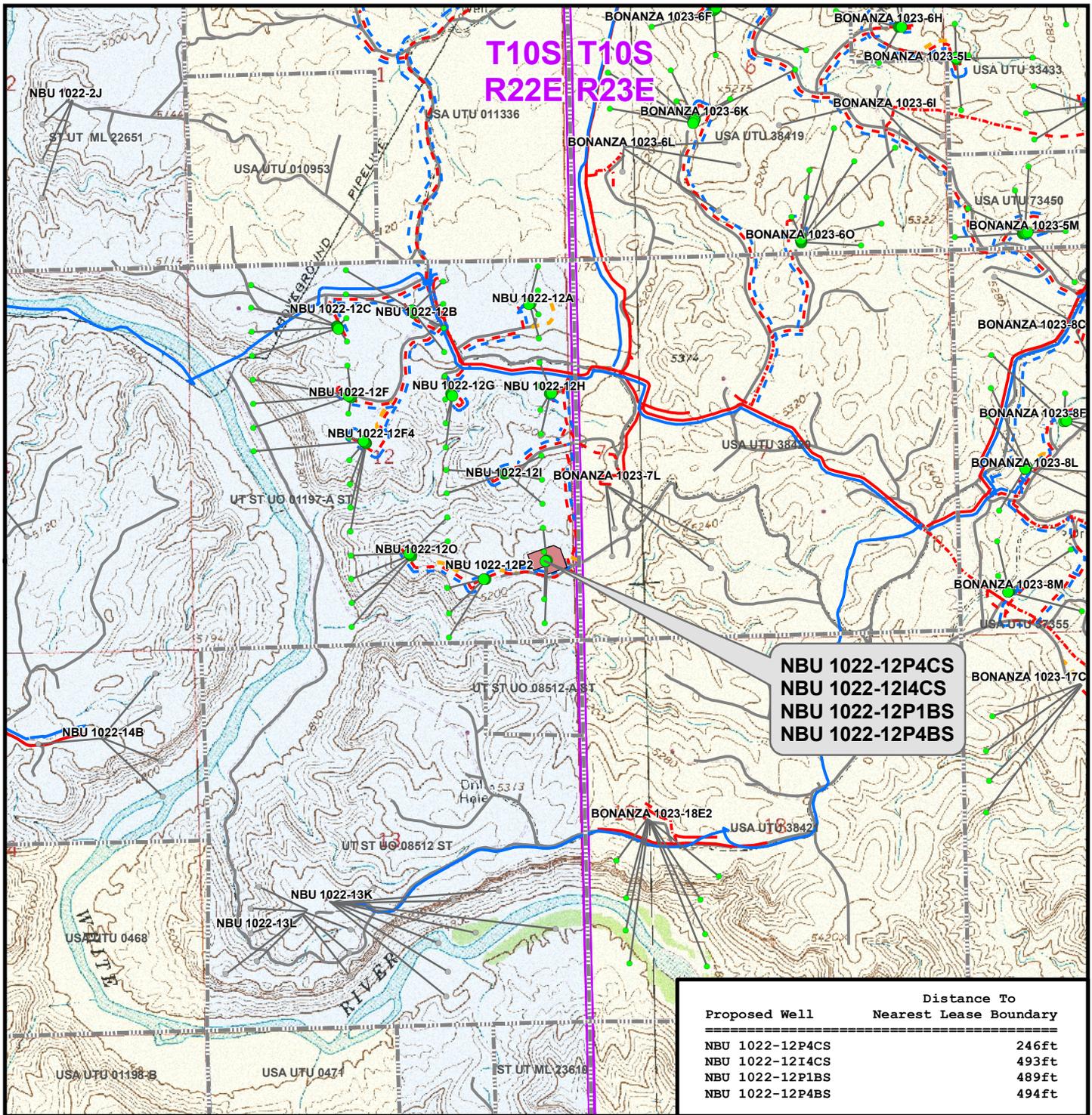
Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 1022-12P

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 1022-12P4CS, NBU 1022-12I4CS,
 NBU 1022-12P1BS & NBU 1022-12P4BS
 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" = 500ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 8 Mar 2011	14
Revised:	Date:	



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 1022-12P

TOPO E
 NBU 1022-12P4CS, NBU 1022-12I4CS,
 NBU 1022-12P1BS & NBU 1022-12P4BS
 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	15
Revised:	Date:	

**Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 1022-12P
WELLS – NBU 1022-12P4CS, NBU 1022-12I4CS,
NBU 1022-12P1BS & NBU 1022-12P4BS
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 direction along the service road approximately 0.2 miles to the proposed access road. Follow the road flags in a northwesterly direction approximately 250 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 48.2 miles in a southerly direction.



US ROCKIES REGION PLANNING

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

NBU 1022-12P PAD

NBU 1022-12P4CS

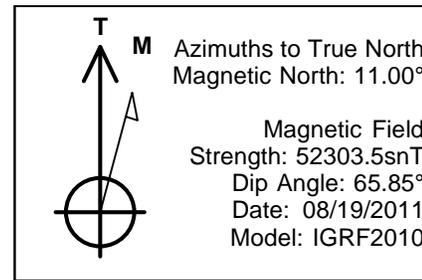
OH

Plan: PLAN #1 PRELIMINARY

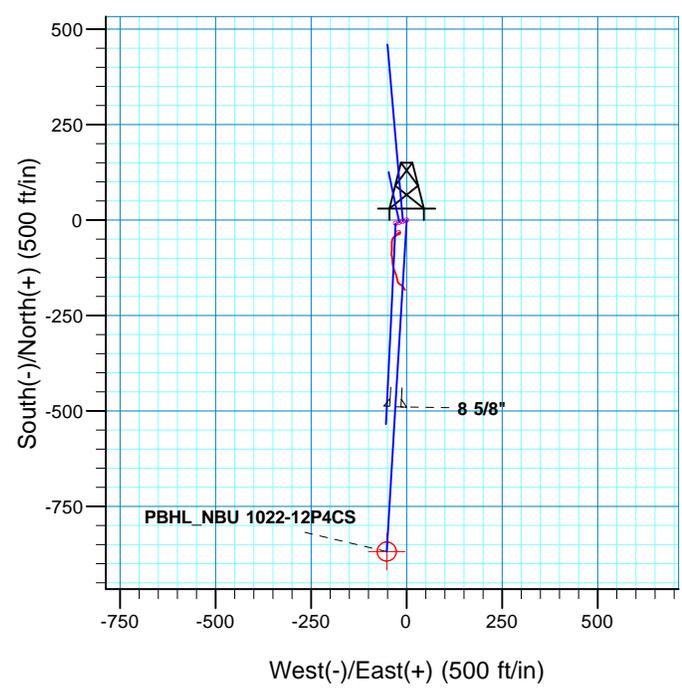
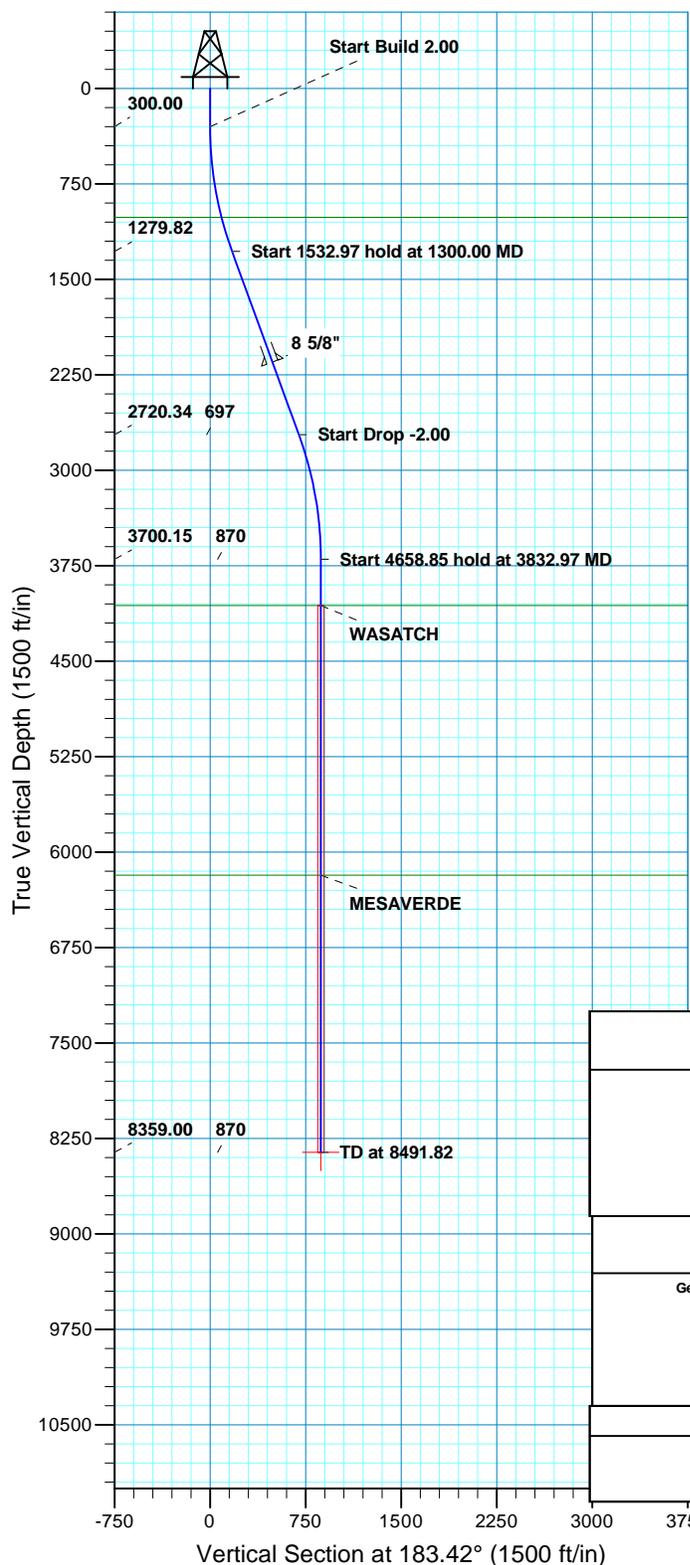
Standard Planning Report

19 August, 2011





WELL DETAILS: NBU 1022-12P4CS								
GL 5262 & KB 4 @ 5266.00ft (ASSUMED)								
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
0.00	0.00	14515337.27	2094456.85	39° 57' 33.376 N	109° 22' 47.158 W			
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	8359.00	-868.30	-51.86	14514468.18	2094420.77	39° 57' 24.793 N	109° 22' 47.824 W	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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
1300.00	20.00	183.42	1279.82	-172.46	-10.30	2.00	183.42	172.77	
2832.97	20.00	183.42	2720.34	-695.83	-41.56	0.00	0.00	697.07	
3832.97	0.00	0.00	3700.15	-868.30	-51.86	2.00	180.00	869.84	
8491.82	0.00	0.00	8359.00	-868.30	-51.86	0.00	0.00	869.84	PBHL_NBU 1022-12P4CS

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1013.00	1020.57	GREEN RIVER
4063.00	4195.82	WASATCH
6182.00	6314.82	MESAVERDE

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	

CASING DETAILS			
TVD	MD	Name	Size
2151.00	2227.10	8 5/8"	8.625

RECEIVED



SDI
Planning Report



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Site:	NBU 1022-12P PAD	North Reference:	True
Well:	NBU 1022-12P4CS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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 1022-12P PAD, SECTION 12 T10S R22E				
Site Position:		Northing:	14,515,334.19 usft	Latitude:	39° 57' 33.347 N
From:	Lat/Long	Easting:	2,094,447.37 usft	Longitude:	109° 22' 47.280 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.04 °

Well	NBU 1022-12P4CS, 1115 FSL 442 FEL					
Well Position	+N/-S	2.91 ft	Northing:	14,515,337.27 usft	Latitude:	39° 57' 33.376 N
	+E/-W	9.53 ft	Easting:	2,094,456.84 usft	Longitude:	109° 22' 47.158 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,262.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/19/11	11.00	65.85	52,304

Design	PLAN #1 PRELIMINARY			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	183.42

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	183.42	1,279.82	-172.46	-10.30	2.00	2.00	0.00	183.42	
2,832.97	20.00	183.42	2,720.34	-695.83	-41.56	0.00	0.00	0.00	0.00	
3,832.97	0.00	0.00	3,700.15	-868.30	-51.86	2.00	-2.00	0.00	180.00	
8,491.82	0.00	0.00	8,359.00	-868.30	-51.86	0.00	0.00	0.00	0.00	PBHL_NBU 1022-12F



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Site:	NBU 1022-12P PAD	North Reference:	True
Well:	NBU 1022-12P4CS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
400.00	2.00	183.42	399.98	-1.74	-0.10	1.75	2.00	2.00	0.00	
500.00	4.00	183.42	499.84	-6.97	-0.42	6.98	2.00	2.00	0.00	
600.00	6.00	183.42	599.45	-15.67	-0.94	15.69	2.00	2.00	0.00	
700.00	8.00	183.42	698.70	-27.83	-1.66	27.88	2.00	2.00	0.00	
800.00	10.00	183.42	797.47	-43.45	-2.59	43.52	2.00	2.00	0.00	
900.00	12.00	183.42	895.62	-62.49	-3.73	62.60	2.00	2.00	0.00	
1,000.00	14.00	183.42	993.06	-84.95	-5.07	85.10	2.00	2.00	0.00	
1,020.57	14.41	183.42	1,013.00	-89.99	-5.37	90.15	2.00	2.00	0.00	
GREEN RIVER										
1,100.00	16.00	183.42	1,089.64	-110.78	-6.62	110.98	2.00	2.00	0.00	
1,200.00	18.00	183.42	1,185.27	-139.96	-8.36	140.21	2.00	2.00	0.00	
1,300.00	20.00	183.42	1,279.82	-172.46	-10.30	172.77	2.00	2.00	0.00	
Start 1532.97 hold at 1300.00 MD										
1,400.00	20.00	183.42	1,373.78	-206.60	-12.34	206.97	0.00	0.00	0.00	
1,500.00	20.00	183.42	1,467.75	-240.74	-14.38	241.17	0.00	0.00	0.00	
1,600.00	20.00	183.42	1,561.72	-274.88	-16.42	275.37	0.00	0.00	0.00	
1,700.00	20.00	183.42	1,655.69	-309.03	-18.46	309.58	0.00	0.00	0.00	
1,800.00	20.00	183.42	1,749.66	-343.17	-20.49	343.78	0.00	0.00	0.00	
1,900.00	20.00	183.42	1,843.63	-377.31	-22.53	377.98	0.00	0.00	0.00	
2,000.00	20.00	183.42	1,937.60	-411.45	-24.57	412.18	0.00	0.00	0.00	
2,100.00	20.00	183.42	2,031.57	-445.59	-26.61	446.38	0.00	0.00	0.00	
2,200.00	20.00	183.42	2,125.54	-479.73	-28.65	480.59	0.00	0.00	0.00	
2,227.10	20.00	183.42	2,151.00	-488.98	-29.20	489.85	0.00	0.00	0.00	
8 5/8"										
2,300.00	20.00	183.42	2,219.51	-513.87	-30.69	514.79	0.00	0.00	0.00	
2,400.00	20.00	183.42	2,313.48	-548.01	-32.73	548.99	0.00	0.00	0.00	
2,500.00	20.00	183.42	2,407.45	-582.15	-34.77	583.19	0.00	0.00	0.00	
2,600.00	20.00	183.42	2,501.42	-616.30	-36.81	617.39	0.00	0.00	0.00	
2,700.00	20.00	183.42	2,595.39	-650.44	-38.85	651.60	0.00	0.00	0.00	
2,800.00	20.00	183.42	2,689.35	-684.58	-40.88	685.80	0.00	0.00	0.00	
2,832.97	20.00	183.42	2,720.34	-695.83	-41.56	697.07	0.00	0.00	0.00	
Start Drop -2.00										
2,900.00	18.66	183.42	2,783.59	-717.98	-42.88	719.26	2.00	-2.00	0.00	
3,000.00	16.66	183.42	2,878.87	-748.26	-44.69	749.60	2.00	-2.00	0.00	
3,100.00	14.66	183.42	2,975.15	-775.20	-46.30	776.59	2.00	-2.00	0.00	
3,200.00	12.66	183.42	3,072.32	-798.78	-47.71	800.20	2.00	-2.00	0.00	
3,300.00	10.66	183.42	3,170.25	-818.95	-48.91	820.41	2.00	-2.00	0.00	
3,400.00	8.66	183.42	3,268.83	-835.70	-49.91	837.19	2.00	-2.00	0.00	
3,500.00	6.66	183.42	3,367.93	-849.00	-50.70	850.51	2.00	-2.00	0.00	
3,600.00	4.66	183.42	3,467.44	-858.84	-51.29	860.37	2.00	-2.00	0.00	
3,700.00	2.66	183.42	3,567.23	-865.22	-51.67	866.76	2.00	-2.00	0.00	
3,800.00	0.66	183.42	3,667.18	-868.11	-51.85	869.65	2.00	-2.00	0.00	
3,832.97	0.00	0.00	3,700.15	-868.30	-51.86	869.84	2.00	-2.00	0.00	
Start 4658.85 hold at 3832.97 MD										
3,900.00	0.00	0.00	3,767.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,000.00	0.00	0.00	3,867.18	-868.30	-51.86	869.84	0.00	0.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Site:	NBU 1022-12P PAD	North Reference:	True
Well:	NBU 1022-12P4CS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,100.00	0.00	0.00	3,967.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,195.82	0.00	0.00	4,063.00	-868.30	-51.86	869.84	0.00	0.00	0.00	
WASATCH										
4,200.00	0.00	0.00	4,067.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,167.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,400.00	0.00	0.00	4,267.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,367.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,467.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,567.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,667.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,767.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,867.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,100.00	0.00	0.00	4,967.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,067.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,167.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,267.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,367.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,467.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,567.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,667.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,767.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,867.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,100.00	0.00	0.00	5,967.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,067.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,167.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,314.82	0.00	0.00	6,182.00	-868.30	-51.86	869.84	0.00	0.00	0.00	
MESAVERDE										
6,400.00	0.00	0.00	6,267.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,367.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,467.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,567.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,667.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,767.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,867.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,100.00	0.00	0.00	6,967.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,067.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,167.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,267.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,367.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,467.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,567.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,667.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,767.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,867.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,967.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,067.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,167.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,267.18	-868.30	-51.86	869.84	0.00	0.00	0.00	
8,491.82	0.00	0.00	8,359.00	-868.30	-51.86	869.84	0.00	0.00	0.00	
PBHL_NBU 1022-12P4CS										



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5262 & KB 4 @ 5266.00ft (ASSUMED)
Site:	NBU 1022-12P PAD	North Reference:	True
Well:	NBU 1022-12P4CS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
PBHL_NBU 1022-12P4C - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,359.00	-868.30	-51.86	14,514,468.18	2,094,420.77	39° 57' 24.793 N	109° 22' 47.824 W

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(in)	(in)	
2,227.10	2,151.00	8 5/8"	8.625	11.000	

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
1,020.57	1,013.00	GREEN RIVER			
4,195.82	4,063.00	WASATCH			
6,314.82	6,182.00	MESAVERDE			

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)		
300.00	300.00	0.00	0.00	Start Build 2.00	
1,300.00	1,279.82	-172.46	-10.30	Start 1532.97 hold at 1300.00 MD	
2,832.97	2,720.34	-695.83	-41.56	Start Drop -2.00	
3,832.97	3,700.15	-868.30	-51.86	Start 4658.85 hold at 3832.97 MD	
8,491.82	8,359.00	-868.30	-51.86	TD at 8491.82	

NBU 1022-12I4CS			
Surface:	1112 FSL / 451 FEL	SESE	Lot
BHL:	1574 FSL / 493 FEL	NESE	Lot
NBU 1022-12P1BS			
Surface:	1109 FSL / 461 FEL	SESE	Lot
BHL:	1240 FSL / 489 FEL	SESE	Lot
NBU 1022-12P4BS			
Surface:	1105 FSL / 470 FEL	SESE	Lot
BHL:	580 FSL / 494 FEL	SESE	Lot
NBU 1022-12P4CS			
Surface:	1115 FSL / 442 FEL	SESE	Lot
BHL:	246 FSL / 491 FEL	SESE	Lot

Pad: NBU 1022-12P PAD

Section 12 T10S R22E

Mineral Lease: UT ST UO 01197-A ST

Uintah County, Utah

Operator: Kerr-McGee Oil & Gas Onshore LP

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:

Two new access roads are proposed (see Topo Map B). The $\pm 610'$ reroutes will more closely follow the proposed gas and liquid pipelines and meet up with the existing access road at the East Section Line. 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:

This pad will expand the existing pad for the NBU 1022-12P. The NBU 1022-12P well location is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of September 9, 2011.

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 $\pm 2,165'$ and the individual segments are broken up as follows:

$\pm 430'$ (0.1 miles) –New 6" buried gas pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

- ±85' (0.02 miles) –New 6” buried gas pipeline from the edge of the pad to the tie-in at the proposed 1022-12P2 Intersection 10" gas pipeline. Please refer to Topo D & D2.
- ±1,650' (0.3 miles) –New 10” buried gas pipeline from the tie-in at the proposed 1022-12P2 Intersection 10" gas pipeline to the tie-in at the proposed 1022-12I Intersection 12" gas pipeline. Please refer to Topo D & D2.

The total liquid gathering pipeline distance from the separator to the tie in point is ±2,165' and the individual segments are broken up as follows:

- ±430' (0.1 miles) –New 6” buried liquid pipeline from the separator to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.
- ±85' (0.02 miles) –New 6” buried liquid pipeline from the edge of the pad to the tie-in at the proposed 1022-12P2 Intersection 6" liquid pipeline. Please refer to Topo D & D2.
- ±1,650' (0.3 miles) –New 6” buried liquid pipeline from the tie-in at the proposed 1022-12P2 Intersection 6" liquid pipeline to the tie-in at the proposed 1022-12I Intersection 6" liquid pipeline. Please refer to 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 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:

Gina T. Becker
Regulatory Analyst II
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6086

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.



Gina T. Becker

September 9, 2011

Date



Joseph D. Johnson
1099 18TH STREET STE. 1800 • DENVER, CO
80202
720-929-6708 • FAX 720-929-7708
E-MAIL: JOE.JOHNSON@ANADARKO.COM

September 7, 2011

Ms. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11
NBU 1022-12P4CS
10S-22E-Sec. 12
SESE/SESE
Surface: 1115' FSL, 442' FEL
Bottom Hole: 246' FSL, 491' FEL
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-12P4CS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

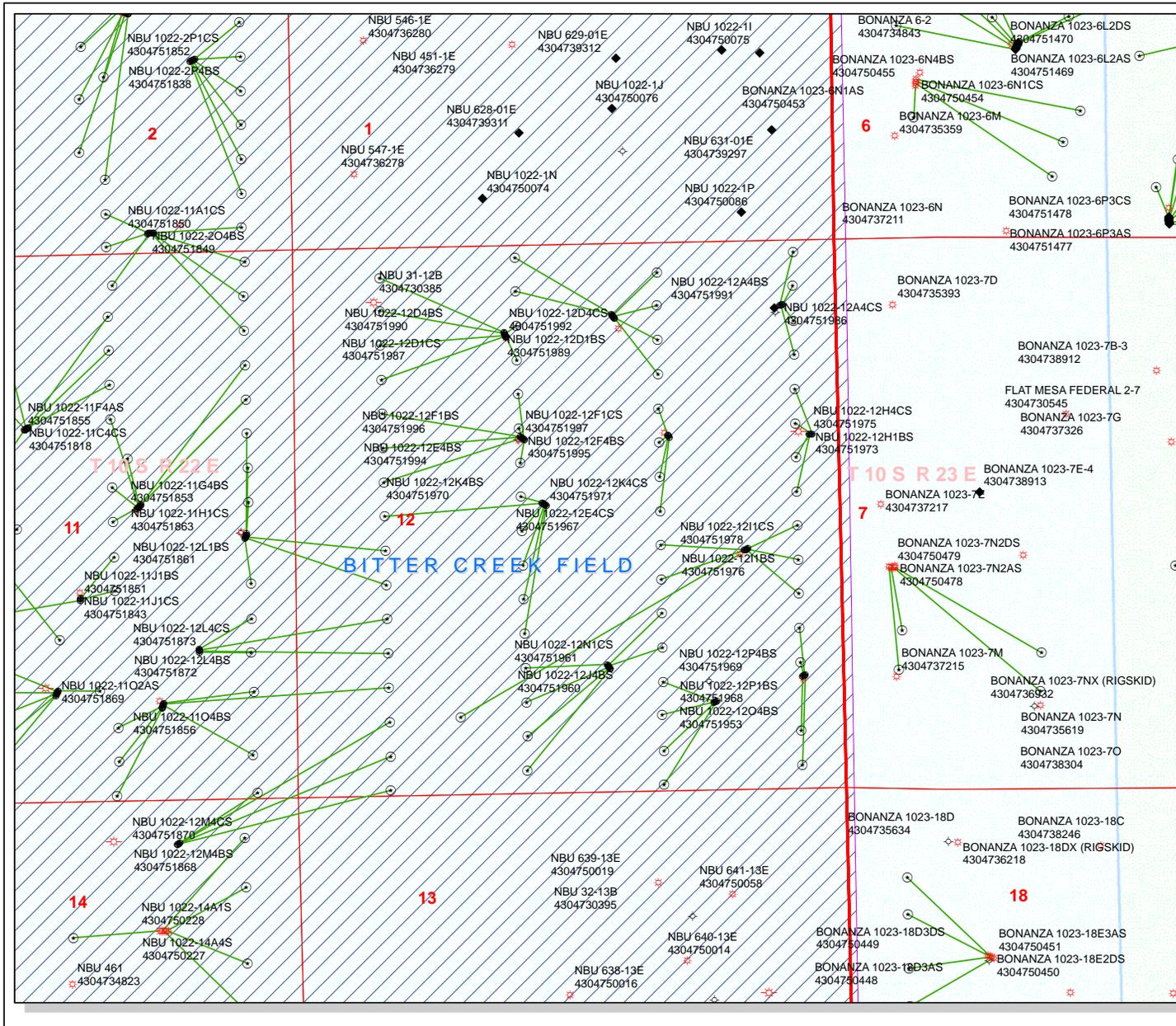
Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink, appearing to read 'Joe D. Johnson', with a horizontal line underneath.

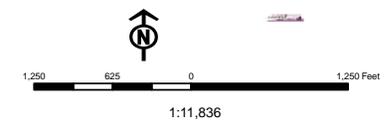
Joseph D. Johnson
Landman



API Number: 4304751947
Well Name: NBU 1022-12P4CS
Township T1.0 . Range R2.2 . Section 12
Meridian: SLBM
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
 Map Produced by Diana Mason

Units	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERMAL	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
Status	SGW - Shut-in Gas Well
Unknown	SOW - Shut-in Oil Well
ABANDONED	TA - Temp. Abandoned
ACTIVE	TW - Test Well
COMBINED	WDW - Water Disposal
INACTIVE	WIW - Water Injection Well
STORAGE	WSW - Water Supply Well
TERMINATED	
Sections	
Township	



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

September 19, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Natural Buttes Unit
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-12H PAD

43-047-51941	NBU 1022-12H4BS	Sec 12 T10S R22E 1846 FNL 0361 FEL
	BHL	Sec 12 T10S R22E 2071 FNL 0491 FEL

43-047-51942	NBU 1022-12H1CS	Sec 12 T10S R22E 1843 FNL 0341 FEL
	BHL	Sec 12 T10S R22E 1740 FNL 0491 FEL

43-047-51973	NBU 1022-12H1BS	Sec 12 T10S R22E 1842 FNL 0331 FEL
	BHL	Sec 12 T10S R22E 1408 FNL 0491 FEL

43-047-51975	NBU 1022-12H4CS	Sec 12 T10S R22E 1845 FNL 0351 FEL
	BHL	Sec 12 T10S R22E 2402 FNL 0492 FEL

NBU 1022-12O PAD

43-047-51943	NBU 1022-12N4BS	Sec 12 T10S R22E 1224 FSL 2329 FEL
	BHL	Sec 12 T10S R22E 0580 FSL 2150 FWL

43-047-51945	NBU 1022-12N4CS	Sec 12 T10S R22E 1216 FSL 2323 FEL
	BHL	Sec 12 T10S R22E 0251 FSL 2141 FWL

43-047-51956	NBU 1022-12J4CS	Sec 12 T10S R22E 1240 FSL 2341 FEL
	BHL	Sec 12 T10S R22E 1409 FSL 1817 FEL

43-047-51959	NBU 1022-12N1BS	Sec 12 T10S R22E 1257 FSL 2352 FEL
	BHL	Sec 12 T10S R22E 1242 FSL 2147 FWL

43-047-51960	NBU 1022-12J4BS	Sec 12 T10S R22E 1249 FSL 2346 FEL
	BHL	Sec 12 T10S R22E 1740 FSL 1816 FEL

RECEIVED: September 20, 2011

API #	WELL NAME			LOCATION						
(Proposed PZ WASATCH-MESA VERDE)										
43-047-51961	NBU 1022-12N1CS	Sec	12	T10S	R22E	1232	FSL	2335	FEL	
	BHL	Sec	12	T10S	R22E	0911	FSL	2149	FWL	
NBU 1022-12B PAD										
43-047-51944	NBU 1022-12B1BS	Sec	12	T10S	R22E	0668	FNL	2232	FEL	
	BHL	Sec	12	T10S	R22E	0259	FNL	1797	FEL	
43-047-51979	NBU 1022-12C1BS	Sec	12	T10S	R22E	0651	FNL	2244	FEL	
	BHL	Sec	12	T10S	R22E	0089	FNL	2138	FWL	
43-047-51980	NBU 1022-12B1CS	Sec	12	T10S	R22E	0676	FNL	2227	FEL	
	BHL	Sec	12	T10S	R22E	0579	FNL	1806	FEL	
43-047-51981	NBU 1022-12C1CS	Sec	12	T10S	R22E	0660	FNL	2238	FEL	
	BHL	Sec	12	T10S	R22E	0414	FNL	2133	FWL	
43-047-51982	NBU 1022-12B4BS	Sec	12	T10S	R22E	0684	FNL	2221	FEL	
	BHL	Sec	12	T10S	R22E	0910	FNL	1807	FEL	
43-047-51983	NBU 1022-12B4CS	Sec	12	T10S	R22E	0692	FNL	2215	FEL	
	BHL	Sec	12	T10S	R22E	1241	FNL	1808	FEL	
NBU 1022-12P PAD										
43-047-51947	NBU 1022-12P4CS	Sec	12	T10S	R22E	1115	FSL	0442	FEL	
	BHL	Sec	12	T10S	R22E	0246	FSL	0491	FEL	
43-047-51962	NBU 1022-12I4CS	Sec	12	T10S	R22E	1112	FSL	0451	FEL	
	BHL	Sec	12	T10S	R22E	1574	FSL	0493	FEL	
43-047-51968	NBU 1022-12P1BS	Sec	12	T10S	R22E	1109	FSL	0461	FEL	
	BHL	Sec	12	T10S	R22E	1240	FSL	0489	FEL	
43-047-51969	NBU 1022-12P4BS	Sec	12	T10S	R22E	1105	FSL	0470	FEL	
	BHL	Sec	12	T10S	R22E	0580	FSL	0494	FEL	
NBU 1022-12P2 PAD										
43-047-51949	NBU 1022-12O1BS	Sec	12	T10S	R22E	0877	FSL	1322	FEL	
	BHL	Sec	12	T10S	R22E	1077	FSL	1818	FEL	
43-047-51950	NBU 1022-12O1CS	Sec	12	T10S	R22E	0873	FSL	1331	FEL	
	BHL	Sec	12	T10S	R22E	0761	FSL	1834	FEL	
43-047-51953	NBU 1022-12O4BS	Sec	12	T10S	R22E	0881	FSL	1313	FEL	
	BHL	Sec	12	T10S	R22E	0415	FSL	1820	FEL	
43-047-51954	NBU 1022-12O4CS	Sec	12	T10S	R22E	0885	FSL	1304	FEL	
	BHL	Sec	12	T10S	R22E	0082	FSL	1828	FEL	
NBU 1022-12A PAD										
43-047-51951	NBU 1022-12A1BS	Sec	12	T10S	R22E	0598	FNL	0621	FEL	
	BHL	Sec	12	T10S	R22E	0081	FNL	0481	FEL	
43-047-51952	NBU 1022-12A1CS	Sec	12	T10S	R22E	0591	FNL	0592	FEL	
	BHL	Sec	12	T10S	R22E	0414	FNL	0490	FEL	

API #	WELL NAME			LOCATION						
(Proposed PZ WASATCH-MESA VERDE)										
43-047-51986	NBU 1022-12A4CS	Sec	12	T10S	R22E	0596	FNL	0611	FEL	
	BHL	Sec	12	T10S	R22E	1077	FNL	0491	FEL	
43-047-51991	NBU 1022-12A4BS	Sec	12	T10S	R22E	0593	FNL	0601	FEL	
	BHL	Sec	12	T10S	R22E	0746	FNL	0490	FEL	
NBU 1022-12I PAD										
43-047-51955	NBU 1022-12J1CS	Sec	12	T10S	R22E	2333	FSL	1011	FEL	
	BHL	Sec	12	T10S	R22E	2071	FSL	1815	FEL	
43-047-51957	NBU 1022-12J1BS	Sec	12	T10S	R22E	2337	FSL	1002	FEL	
	BHL	Sec	12	T10S	R22E	2402	FSL	1814	FEL	
43-047-51958	NBU 1022-12I4BS	Sec	12	T10S	R22E	2341	FSL	0993	FEL	
	BHL	Sec	12	T10S	R22E	1905	FSL	0493	FEL	
43-047-51976	NBU 1022-12I1BS	Sec	12	T10S	R22E	2350	FSL	0974	FEL	
	BHL	Sec	12	T10S	R22E	2568	FSL	0492	FEL	
43-047-51978	NBU 1022-12I1CS	Sec	12	T10S	R22E	2345	FSL	0984	FEL	
	BHL	Sec	12	T10S	R22E	2237	FSL	0492	FEL	
NBU 1022-12G PAD										
43-047-51963	NBU 1022-12G1CS	Sec	12	T10S	R22E	1833	FNL	1721	FEL	
	BHL	Sec	12	T10S	R22E	1904	FNL	1810	FEL	
43-047-51972	NBU 1022-12G4BS	Sec	12	T10S	R22E	1841	FNL	1715	FEL	
	BHL	Sec	12	T10S	R22E	2235	FNL	1812	FEL	
43-047-51974	NBU 1022-12G1BS	Sec	12	T10S	R22E	1826	FNL	1727	FEL	
	BHL	Sec	12	T10S	R22E	1572	FNL	1809	FEL	
43-047-51977	NBU 1022-12G4CS	Sec	12	T10S	R22E	1849	FNL	1709	FEL	
	BHL	Sec	12	T10S	R22E	2566	FNL	1813	FEL	
NBU 1022-12F4 PAD										
43-047-51964	NBU 1022-12F4CS	Sec	12	T10S	R22E	2462	FNL	2342	FWL	
	BHL	Sec	12	T10S	R22E	2401	FNL	2141	FWL	
43-047-51965	NBU 1022-12K1BS	Sec	12	T10S	R22E	2473	FNL	2359	FWL	
	BHL	Sec	12	T10S	R22E	2567	FSL	2142	FWL	
43-047-51966	NBU 1022-12K1CS	Sec	12	T10S	R22E	2479	FNL	2367	FWL	
	BHL	Sec	12	T10S	R22E	2236	FSL	2144	FWL	
43-047-51967	NBU 1022-12E4CS	Sec	12	T10S	R22E	2467	FNL	2350	FWL	
	BHL	Sec	12	T10S	R22E	2565	FNL	0822	FWL	
43-047-51970	NBU 1022-12K4BS	Sec	12	T10S	R22E	2484	FNL	2375	FWL	
	BHL	Sec	12	T10S	R22E	1904	FSL	2145	FWL	
43-047-51971	NBU 1022-12K4CS	Sec	12	T10S	R22E	2490	FNL	2384	FWL	
	BHL	Sec	12	T10S	R22E	1573	FSL	2146	FWL	

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ WASATCH-MESA VERDE)

NBU 1022-12CPAD

43-047-51984	NBU 1022-12C4BS	Sec 12 T10S R22E 0827 FNL 2020 FWL
	BHL	Sec 12 T10S R22E 0745 FNL 2134 FWL

43-047-51985	NBU 1022-12C4CS	Sec 12 T10S R22E 0855 FNL 2031 FWL
	BHL	Sec 12 T10S R22E 1076 FNL 2135 FWL

43-047-51987	NBU 1022-12D1CS	Sec 12 T10S R22E 0818 FNL 2016 FWL
	BHL	Sec 12 T10S R22E 0579 FNL 0819 FWL

43-047-51989	NBU 1022-12D1BS	Sec 12 T10S R22E 0809 FNL 2013 FWL
	BHL	Sec 12 T10S R22E 0260 FNL 0823 FWL

43-047-51990	NBU 1022-12D4BS	Sec 12 T10S R22E 0837 FNL 2024 FWL
	BHL	Sec 12 T10S R22E 0910 FNL 0819 FWL

43-047-51992	NBU 1022-12D4CS	Sec 12 T10S R22E 0846 FNL 2027 FWL
	BHL	Sec 12 T10S R22E 1241 FNL 0820 FWL

NBU 1022-12FPAD

43-047-51988	NBU 1022-12E1BS	Sec 12 T10S R22E 1818 FNL 2146 FWL
	BHL	Sec 12 T10S R22E 1572 FNL 0820 FWL

43-047-51993	NBU 1022-12E1CS	Sec 12 T10S R22E 1824 FNL 2154 FWL
	BHL	Sec 12 T10S R22E 1903 FNL 0821 FWL

43-047-51994	NBU 1022-12E4BS	Sec 12 T10S R22E 1835 FNL 2170 FWL
	BHL	Sec 12 T10S R22E 2234 FNL 0821 FWL

43-047-51995	NBU 1022-12F4BS	Sec 12 T10S R22E 1847 FNL 2187 FWL
	BHL	Sec 12 T10S R22E 2070 FNL 2140 FWL

43-047-51996	NBU 1022-12F1BS	Sec 12 T10S R22E 1841 FNL 2179 FWL
	BHL	Sec 12 T10S R22E 1407 FNL 2137 FWL

43-047-51997	NBU 1022-12F1CS	Sec 12 T10S R22E 1830 FNL 2162 FWL
	BHL	Sec 12 T10S R22E 1739 FNL 2138 FWL

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
 DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals,
 email=Michael_Coulthard@blm.gov, c=US
 Date: 2011.09.19 14:47:24 -0600

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:9-19-11

RECEIVED: September 20, 2011

From: Diana Mason
To:
Subject: Fwd: Kerr McGee APD approvals

The following APDs have been approved by SITLA including arch and paleo clearance.

NBU 1022-12A1BS (4304751951)
NBU 1022-12A1CS (4304751952)
NBU 1022-12A4CS (4304751986)
)NBU 1022-12A4BS (4304751991)
NBU 1022-12J1CS (4304751955)
NBU 1022-12J1BS (4304751957)
NBU 1022-12I4BS (4304751958)
NBU 1022-12I1BS (4304751976)
NBU 1022-12I1CS (4304751978)
NBU 1022-12B1BS (4304751944)
)NBU 1022-12C1BS (4304751979)
NBU 1022-12B1CS (4304751980)
)NBU 1022-12C1CS (4304751981)
NBU 1022-12B4BS (4304751982)
NBU 1022-12B4CS (4304751983)
)NBU 1022-12H4BS (4304751941)
NBU 1022-12H1CS (4304751942)
NBU 1022-12H1BS (4304751973)
NBU 1022-12H4CS (4304751975)
NBU 1022-12F4CS (4304751964)
NBU 1022-12K1BS (4304751965)
NBU 1022-12K1CS (4304751966)
NBU 1022-12E4CS (4304751967)
NBU 1022-12K4BS (4304751970)
NBU 1022-12K4CS (4304751971)
NBU 1022-12O1BS (4304751949)
NBU 1022-12O1CS (4304751950)
NBU 1022-12O4BS (4304751953)
NBU 1022-12O4CS (4304751954)
NBU 1022-12P4CS (4304751947)
NBU 1022-12I4CS (4304751962)
NBU 1022-12P1BS (4304751968)
NBU 1022-12P4BS (4304751969)
NBU 1022-12G1CS (4304751963)
NBU 1022-12G4BS (4304751972)
NBU 1022-12G1BS (4304751974)
NBU 1022-12G4CS (4304751977)
NBU 1022-12N4BS (4304751943)
NBU 1022-12N4CS (4304751945)
NBU 1022-12J4CS (4304751956)
NBU 1022-12N1BS (4304751959)
NBU 1022-12J4BS (4304751960)
NBU 1022-12N1CS (4304751961)

-Jim Davis

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 1022-12P4C			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2079	8359		
Previous Shoe Setting Depth (TVD)	40	2079		
Max Mud Weight (ppg)	8.3	12.5		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5350	12.3		

Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	897	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	648	NO <input type="checkbox"/> air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	440	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	448	NO <input type="checkbox"/> Reasonable depth for area
Required Casing/BOPE Test Pressure=		2079	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=	5433	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4430	YES <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3594	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4051	NO <input type="checkbox"/> Reasonable
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2079	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 <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO <input type="checkbox"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO <input type="checkbox"/>
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 <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO <input type="checkbox"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=			psi

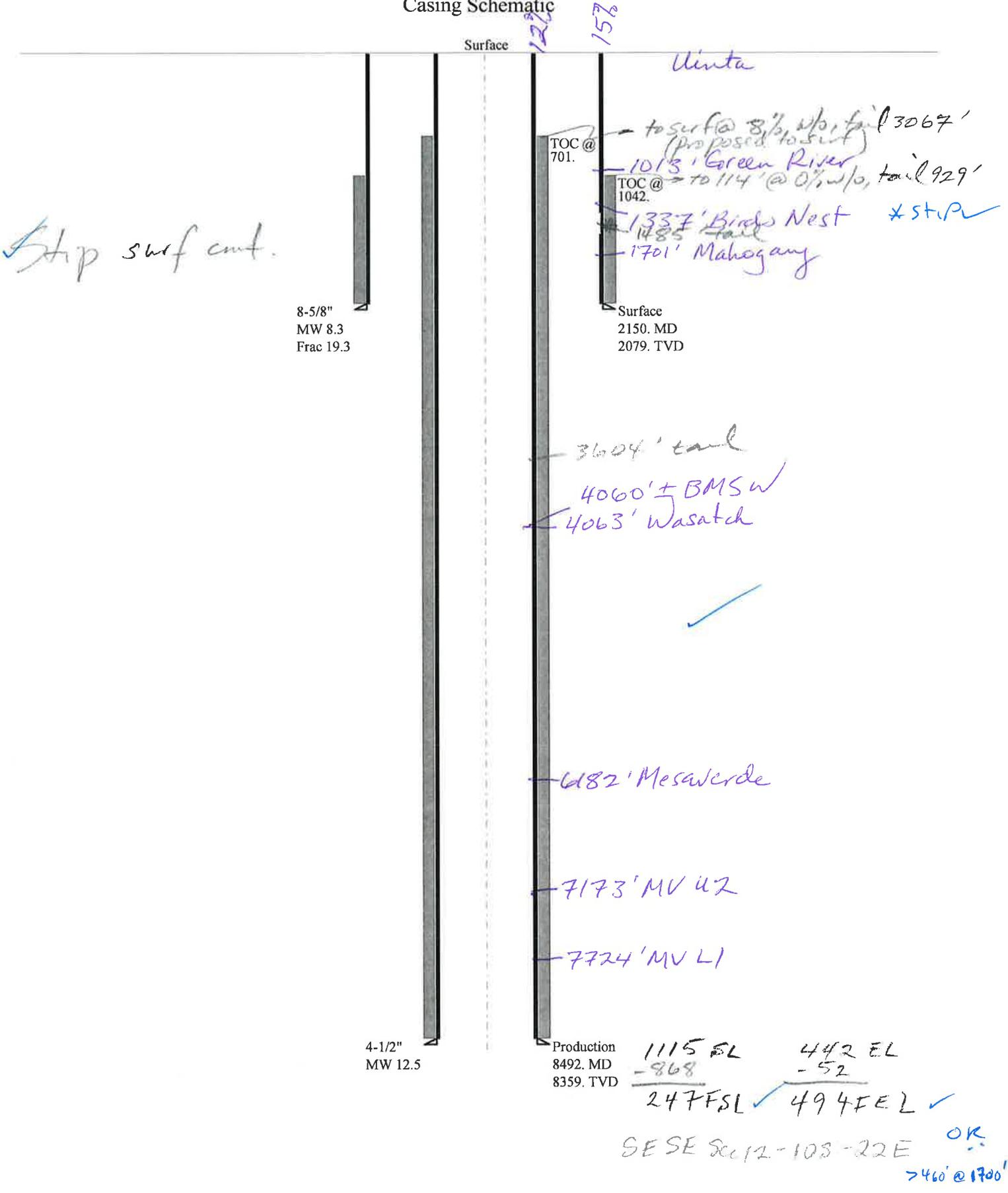
API Well Number: 43047519470000

*Max Pressure Allowed @ Previous Casing Shoe=

psi *Assumes 1psi/ft frac gradient

43047519470000 NBU 1022-12P4CS

Casing Schematic



Well name:	43047519470000 NBU 1022-12P4CS	
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.	
String type:	Surface	Project ID: 43-047-51947
Location:	UINTAH COUNTY	

Design parameters:

Collapse

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

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

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: 1,042 ft

Burst

Max anticipated surface pressure: 1,892 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,141 psi

No backup mud specified.

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: 1,878 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 463 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 20 °

Re subsequent strings:

Next setting depth: 8,492 ft
Next mud weight: 12.500 ppg
Next setting BHP: 5,514 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,150 ft
Injection pressure: 2,150 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	2150	8.625	28.00	I-55	LT&C	2079	2150	7.892	85140
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	899	1880	2.090	2141	3390	1.58	58.2	348	5.98 J

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

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

Date: November 3, 2011
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2079 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

Well name:	43047519470000 NBU 1022-12P4CS	
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.	
String type:	Production	Project ID: 43-047-51947
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

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 191 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft
Cement top: 701 ft

Burst

Max anticipated surface pressure: 3,589 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,428 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 6,930 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 870 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

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	8492	4.5	11.60	I-80	LT&C	8359	8492	3.875	112094
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	5428	6360	1.172	5428	7780	1.43	97	212	2.19 J

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

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

Date: November 3, 2011
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8359 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

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 1022-12P4CS
API Number 43047519470000 **APD No** 4630 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 SESE **Sec** 12 **Tw** 10.0S **Rng** 22.0E 1115 **FSL** 442 **FEL**
GPS Coord (UTM) 638390 4424283 **Surface Owner**

Participants

Andy Lytle, Sheila Wopsock, Charles Chase, Grizz Oleen, Jaime Scharnowski, Doyle Holmes, (Kerr McGee). John Slauch, Mitch Batty, (Timberline). Jim Davis (SITLA). Ben Williams (DWR). David Hackford, (DOGM).

Regional/Local Setting & Topography

The general area is in the southeast portion of the Natural Buttes Unit. Within this area is the White River and rugged drainages that drain into it. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River is 3900'. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 48.2 miles to the northwest. Access from Vernal is by following Utah State, Uintah County and oilfield development roads. Three wells, in addition to this one will be directionally drilled from this pad. (For a total of four new wells). There is one existing well on this pad. (The NBU 1022-12P). At this time, the decision rather to PA or TA this well has not been made. This proposed location takes in an existing location, and very little new construction will be necessary except for digging the reserve pit. The existing access road will be re-routed for 250 feet. The location runs in an east-west direction along the top of a flat topped ridge. This ridge breaks off sharply into rugged secondary canyons on the southwest, northwest and west sides. New construction will consist of approx. 50 feet on all sides of the existing pad, and an additional 50 feet on the east side for reserve pit and excess cut stockpile. No drainage concerns exist, and no diversions will be needed. The pad as modified should be stable and should be a suitable location for five wells, and is on the best site available in the immediate area.

Surface Use Plan

Current Surface Use

Grazing
Wildlife Habitat
Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.05	Width 352 Length 425	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Prickly pear, wild onion, shadscale, mat saltbrush, Indian ricegrass, halogeton, pepper grass, annuals and curly Vegetation is a salt desert shrub type. Principal species present are cheatgrass, black sagebrush, stipa, mesquite grass.

Sheep, antelope, coyote, raptors, small mammals and birds.

Soil Type and Characteristics

Rocky sandy clay loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y **Paleo Potential Observed?** N **Cultural Survey Run?** Y **Cultural Resources?** N

Reserve Pit

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)	100 to 200	5	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	40	1 Sensitivity Level

Characteristics / Requirements

The reserve pit is planned in an area of cut on the east side of the location. Dimensions are 120' x 260' x 12' deep with two feet of freeboard. Kerr McGee agreed to line this pit with a 16 mil synthetic liner and a layer of felt sub-liner.

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

Other Observations / Comments

David Hackford
Evaluator

10/12/2011
Date / Time

Application for Permit to Drill Statement of Basis

11/22/2011

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
4630	43047519470000	SITLA	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 1022-12P4CS	Unit		NATURAL BUTTES	
Field	NATURAL BUTTES	Type of Work		DRILL	
Location	SESE 12 10S 22E S 1115 FSL 442 FEL GPS Coord (UTM) 638325E 4424491N				

Geologic Statement of Basis

Kerr McGee proposes to set 2,160' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 4,060'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 12. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill
APD Evaluator

10/19/2011
Date / Time

Surface Statement of Basis

The general area is in the southeast portion of the Natural Buttes Unit. Within this area is the White River and rugged drainages that drain into it. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River is 3900'. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 48 miles to the northwest. Access from Vernal is by following Utah State, Uintah County and oilfield development roads. The existing access road will be re-routed for the final 250 feet.

Four wells will be directionally drilled from this location. They are the NBU 1022-12I4CS, NBU 1022-12P1BS, NBU 1022-12P4BS and the NBU 1022-12P4CS. The existing location has one well. This well is the NBU 1022-12P, and at this time the decision rather to PA or TA this well has not been made. The location is on a flat topped ridge that runs in a east-west direction. This ridge breaks off sharply into rugged secondary canyons on the southwest, northwest and west sides. No drainage concerns exist, and no diversions will be needed. The pad as modified should be stable and sufficient for five wells, and is the best site for a location in the immediate area.

New construction will consist of approx. 50 feet on all sides of the existing pad, and an additional 50 feet on the east side for reserve pit and excess cut stockpile.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA and Ben Williams with DWR were invited by email to the pre-site evaluation. Both were present. Kerr McGee personnel were told to consult with SITLA for reclamation standards including seeding mixes to be used.

David Hackford
Onsite Evaluator

10/12/2011
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
-----------------	------------------

RECEIVED: November 22, 2011

Application for Permit to Drill Statement of Basis

11/22/2011

Utah Division of Oil, Gas and Mining

Page 2

Pits A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.

Pits The reserve pit should be located on the south side of the location.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/14/2011**API NO. ASSIGNED:** 43047519470000**WELL NAME:** NBU 1022-12P4CS**OPERATOR:** KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)**PHONE NUMBER:** 720 929-6086**CONTACT:** Gina Becker**PROPOSED LOCATION:** SESE 12 100S 220E**Permit Tech Review:** **SURFACE:** 1115 FSL 0442 FEL**Engineering Review:** **BOTTOM:** 0246 FSL 0491 FEL**Geology Review:** **COUNTY:** Uintah**LATITUDE:** 39.95926**LONGITUDE:** -109.38050**UTM SURF EASTINGS:** 638325.00**NORTHINGS:** 4424491.00**FIELD NAME:** NATURAL BUTTES**LEASE TYPE:** 3 - State**LEASE NUMBER:** UT ST UO 01997-A ST**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

Commingle 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: Suspends General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations:

- 3 - Commingle - ddoucet
- 5 - Statement of Basis - bhill
- 15 - Directional - dmason
- 17 - Oil Shale 190-5(b) - dmason
- 25 - Surface Casing - hmacdonald



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 1022-12P4CS
API Well Number: 43047519470000
Lease Number: UT ST UO 01997-A ST
Surface Owner: STATE
Approval Date: 11/22/2011

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.

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

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:



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: UT ST UO 01997-	
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 1022-12P4CS	
9. API NUMBER: 43047519470000	
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: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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 checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/23/2012	<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 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 checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Exception Letter"/>

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

The operator request to add this Exception Letter to the well file.
 Thanks!

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 April 24, 2012**

NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 4/23/2012	



Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779

April 19, 2012

Ms. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

Re: NBU 1022-12P4CS
T10S- R22E
Section 12: SESE (surface); SESE (bottom hole)
1115' FSL, 442' FEL (surface)
246' FSL, 491' FEL (bottom hole)
Uintah County, Utah

Dear Mrs. Mason:

Kerr-McGee Oil & Gas Onshore LP has submitted a permit to drill the captioned well to test the Wasatch and Mesaverde formations. The well is located at an exception location to State Rule 173-14 (NBU). The well location is less than 460' from the unit boundary. Kerr-McGee owns 100% of the leasehold in the offset lands and has no objection to the exception location.

Kerr-McGee requests your approval of this exception location. If you have any questions or require any additional information, please do not hesitate to call me at 720-929-6708.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink, appearing to read 'Joe D. Johnson', with a horizontal line underneath.

Joseph D. Johnson
Landman II

cc: Chris Latimer

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

FORM 9

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

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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.

7. UNIT or CA AGREEMENT NAME:
UTU63047A

1. TYPE OF WELL: OIL WELL GAS WELL OTHER _____

8. WELL NAME and NUMBER:
Multiple Well Locations

2. NAME OF OPERATOR:
Kerr-McGee Oil & Gas Onshore, L.P.

9. API NUMBER:

3. ADDRESS OF OPERATOR:
P.O. Box 173779 Denver CO 80217

PHONE NUMBER:
(720) 929-6086

10. FIELD AND POOL, OR W/LDCAT:
Natural Buttes

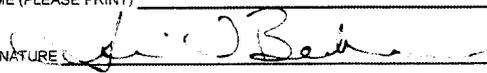
4. LOCATION OF WELL:
FOOTAGES AT SURFACE: **Various Locations in T10S-R22E, Section 12** COUNTY: **Uintah**
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **12 10S 22E 6** STATE: **UTAH**

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 (Submit in Duplicate) Approximate date work will start: <u>4/23/2012</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Lease Number Correction</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
Kerr-McGee is requesting approval to correct the lease number from UT ST UO 01997-A ST to UT ST UO 01197-A ST for various well locations. Please see attached well list.

Thank you!

NAME (PLEASE PRINT) Gina T Becker TITLE Senior Regulatory Analyst
SIGNATURE  DATE 4/23/2012

(This space for State use only)

RECEIVED

APR 24 2012

Div. of Oil, Gas & Mining

	API UWI NO	WELL NAME	SL STATE	SL SECTION	SL TOWNSHIP	SL RANGE	SL COUNTY NAME	GOV LEASE NO	FEDERAL LEASE NO
1	4304751951	NBU 1022-12A1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
2	4304751952	NBU 1022-12A1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
3	4304751991	NBU 1022-12A4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
4	4304751986	NBU 1022-12A4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
5	4304751944	NBU 1022-12B1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
6	4304751980	NBU 1022-12B1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
7	4304751982	NBU 1022-12B4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
8	4304751983	NBU 1022-12B4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
9	4304751979	NBU 1022-12C1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
10	4304751981	NBU 1022-12C1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
11	4304751984	NBU 1022-12C4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
12	4304751985	NBU 1022-12C4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
13	4304751989	NBU 1022-12D1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
14	4304751987	NBU 1022-12D1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
15	4304751990	NBU 1022-12D4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
16	4304751992	NBU 1022-12D4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
17	4304751988	NBU 1022-12E1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
18	4304751993	NBU 1022-12E1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
19	4304751994	NBU 1022-12E4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
20	4304751996	NBU 1022-12F1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
21	4304751997	NBU 1022-12F1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
22	4304751995	NBU 1022-12F4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
23	4304751967	NBU 1022-12E4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
24	4304751964	NBU 1022-12F4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
25	4304751965	NBU 1022-12K1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
26	4304751966	NBU 1022-12K1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
27	4304751970	NBU 1022-12K4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
28	4304751971	NBU 1022-12K4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
29	4304751974	NBU 1022-12G1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
30	4304751963	NBU 1022-12G1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
31	4304751972	NBU 1022-12G4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
32	4304751977	NBU 1022-12G4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
33	4304751973	NBU 1022-12H1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
34	4304751942	NBU 1022-12H1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
35	4304751941	NBU 1022-12H4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
36	4304751975	NBU 1022-12H4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
37	4304751976	NBU 1022-12I1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
38	4304751978	NBU 1022-12I1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
39	4304751958	NBU 1022-12I4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
40	4304751957	NBU 1022-12J1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
41	4304751955	NBU 1022-12J1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
42	4304751960	NBU 1022-12J4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
43	4304751956	NBU 1022-12J4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
44	4304751959	NBU 1022-12N1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
45	4304751961	NBU 1022-12N1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
46	4304751943	NBU 1022-12N4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
47	4304751945	NBU 1022-12N4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
48	4304751962	NBU 1022-12I4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
49	4304751968	NBU 1022-12P1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A

	API UWI NO	WELL NAME	SL STATE	SL SECTION	SL TOWNSHIP	SL RANGE	SL COUNTY NAME	GOV LEASE NO	FEDERAL LEASE NO
50	4304751969	NBU 1022-12P4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
51	4304751947	NBU 1022-12P4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
52	4304751949	NBU 1022-12O1BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
53	4304751950	NBU 1022-12O1CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
54	4304751953	NBU 1022-12O4BS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A
55	4304751954	NBU 1022-12O4CS	UT	12	10	22	UINTAH	UT ST UO 01197-A ST	UTU63047A

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.	
1. TYPE OF WELL Gas Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UT ST UO 01197-
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	8. WELL NAME and NUMBER: NBU 1022-12P4CS
PHONE NUMBER: 720 929-6511	9. API NUMBER: 43047519470000
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	COUNTY: UINTAH
	STATE: UTAH

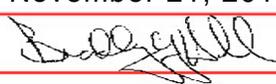
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 11/22/2012	<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 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 checked="" 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.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the
 Utah Division of
 Oil, Gas and Mining

Date: November 21, 2012
 By: 

NAME (PLEASE PRINT) Luke Urban	PHONE NUMBER 720 929-6501	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 11/15/2012	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047519470000

API: 43047519470000

Well Name: NBU 1022-12P4CS

Location: 1115 FSL 0442 FEL QTR SESE SEC 12 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 11/22/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

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

Signature: Luke Urban

Date: 11/15/2012

Title: Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

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: UT ST UO 01197-
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Gas Well		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		8. WELL NAME and NUMBER: NBU 1022-12P4CS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047519470000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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 checked="" type="checkbox"/> SPUD REPORT Date of Spud: 3/15/2013	<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 WELL SPUD ON MARCH 15, 2013 AT 08:00. MIRU TRIPLE A BUCKET RIG. DRILLED 20in CONDUCTOR HOLE TO 40ft. RAN 14in 36.7lb SCHEDULE 10 CONDUCTOR PIPE. CEMENT WITH 28 SACKS READY MIX. ANTICIPATED SURFACE RIG SPUD DATE ON April 20, 2013 AND CASING CEMENT April 21, 2013 AT 08:00 HRS.

**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
March 21, 2013**

NAME (PLEASE PRINT) Luke Urban	PHONE NUMBER 720 929-6501	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 3/20/2013	

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.	
1. TYPE OF WELL Gas Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UT ST UO 01197-
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	8. WELL NAME and NUMBER: NBU 1022-12P4CS
PHONE NUMBER: 720 929-6511	9. API NUMBER: 43047519470000
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: 4/8/2013	<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: April 08, 2013

By: *Derek Duff*

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 4/8/2013	

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 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) 929-6857

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751947	NBU 1022-12P4CS		SESE	12	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/15/2013			3/28/13	
Comments: MIRU TRIPLE A BUCKET RIG. SPUD WELL LOCATION ON March 15, 2013 AT 08:00 HRS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751962	NBU 1022-12I4CS		SESE	12	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/15/2013			3/28/13	
Comments: MIRU TRIPLE A BUCKET RIG. SPUD WELL LOCATION ON March 15, 2013 AT 11:00 HRS.							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751968	NBU 1022-12P1BS		SESE	12	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/15/2013			3/28/13	
Comments: MIRU TRIPLE A BUCKET RIG. SPUD WELL LOCATION ON March 15, 2013 AT 14:00 HRS.							

ACTION CODES:

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

Luke Urban

Name (Please Print)

Signature

Sr. Regulatory Specialist

Title

3/20/2013

Date

RECEIVED
MAR 20 2013

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UT ST UO 01197-	
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 1022-12P4CS	
9. API NUMBER: 43047519470000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
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: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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: 5/3/2013	<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 April 2013. Well TD at 40 ft. .

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

NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUMBER 720 929-6304	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 5/3/2013	

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.	
1. TYPE OF WELL Gas Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UT ST UO 01197-
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 12 Township: 10.0S Range: 22.0E Meridian: S	8. WELL NAME and NUMBER: NBU 1022-12P4CS
PHONE NUMBER: 720 929-6511	9. API NUMBER: 43047519470000
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: 6/4/2013	<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.

Drilled to 2,380 ft. in May 2013.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 June 06, 2013**

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 6/4/2013	

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# PIONEER 54
Submitted By STUART NEILSON Phone Number 435-790-2921
Well Name/Number NBU 1022-12P4CS
Qtr/Qtr SE/SE Section 12 Township 10S Range 22E
Lease Serial Number UT ST UO 01997-A ST
API Number 4304751947

Casing – Time casing run starts, not cementing times.

- Production Casing
 Other

Date/Time 6/21/13 9 AM PM

BOPE

- Initial BOPE test at surface casing point
 Other

Date/Time _ _ AM PM

Rig Move

Location To: NBU 1022-12P PAD

Date/Time __ _ AM PM

Remarks WELL 1 OF 4 ON THE NBU 1022-12I PAD

RECEIVED

JUN 21 2013

DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UT ST UO 01197-	
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 1022-12P4CS	
9. API NUMBER: 43047519470000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
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: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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: 7/1/2013	<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.

Drilled to 8,525 ft. in June 2013.

**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: UT ST UO 01197-	
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 1022-12P4CS	
9. API NUMBER: 43047519470000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
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: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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.

Started completing the well. Well TD at 8,525 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 DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UT ST UO 01197-	
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 1022-12P4CS	
9. API NUMBER: 43047519470000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
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: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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: 8/23/2013	<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 ON 8/23/2013. 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
 August 27, 2013

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 8/26/2013	

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:
UT ST UO 01197-A ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 1022-12P4CS

9. API NUMBER:
43-047-51947

10. FIELD AND POOL, OR WILDCAT
Natural Buttes

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

12. COUNTY
UINTAH

13. STATE
UTAH

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER _____

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

2. NAME OF OPERATOR:
KERR-MCGEE OIL AND GAS ONSHORE LP

3. ADDRESS OF OPERATOR:
P.O. Box 173779 CITY Denver STATE Co ZIP 82017 PHONE NUMBER: 720-929-6000

14. DATE SPUDDED: **3/15/2013** 15. DATE T. D. REACHED: **6/21/2013** 16. DATE COMPLETED: **8/23/2013** ABANDONED READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):
5281 RKB

18. TOTAL DEPTH: MD **8525** TVD **8401** 19. PLUG BACK T.D.: MD **8464** TVD **8340** 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

23. WAS WELL CORED? YES (Submit analysis)
WAS DST RUN? YES (Submit report)
DIRECTIONAL SURVEY? YES (Submit copy)

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

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20	14 STL	36.7	0	40		28			
11	8.63 J-55	28	19	2360		550		0	
7.875	4.5 I-80	11.6	19	8517		1415		1050	

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	7819							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) WASATCH	5706	6059			5,706 6,059	0.36	40	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) MESAVERDE	6513	8299			6,513 8,299	0.36	158	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5706-8299	PUMP 10,277 BBLs SLICK H2O & 235,604 LBS 30/50 OTTAWA SAND 9 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: 8/23/2013		TEST DATE: 8/31/2013		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 18	GAS - MCF: 2561	WATER - BBL: 0	PROD. METHOD: Flowing
CHOKE SIZE: 20/64	TBG. PRESS. 1825	CSG. PRESS. 2048	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR RATES: →	OIL - BBL: 18	GAS - MCF: 2561	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	1022
				BIRD'S NEST	1392
				MAHOGANY	1874
				WASATCH	4191
				MESAVERDE	6250

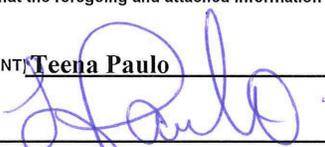
35. ADDITIONAL REMARKS (Include plugging procedures)

The first 210 ft. of the surface hole was drilled with a 12 1/4 in. bit. The remainder of surface hole was drilled with an 11in. bit. DQX csg was run from surface to 4980 ft.; LTC csg was run from 4980 ft. to 8517 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 9-17-2013

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
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
Fax: 801-359-3940

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 5/1/2013	End Date: 6/21/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/11/2013	21:30 - 0:00	2.50	RDMO	01	E	P		RIG DOWN MOVE OUT.
5/12/2013	0:00 - 8:00	8.00	RDMO	01	E	P		RIG DOWN MOVE OUT.
	8:00 - 13:00	5.00	MIRU	01	A	P		MOVE .6 MILES TO NBU 1022-12P4CS MOVE IN AND RIG UP CAMPS AND CLOSED LOOP SYSTEM / STALLION 2 SEMI-TRUCKS 2 CREW TRUCKS, 5 HANDS / J.D FIELD SERVICE 6 SEMI-TRUCKS - 2 CREW RIDES 1 BOBCAT / 13 TOTAL HANDS (TRUCKS GELLING UP) PROPETRO 5 SEMI LOADS 1 RIG 2 CREW RIDES / 6 HANDS
	13:00 - 16:00	3.00	MIRU	01	B	P		RIG UP RIGALL 4" MUD LINES, SET MATTING BOARD, STAND UP RIG, RIG UP FLOW LINE, STE PIPE RACKS, SET TOOL BASKIT, UNLOAD AND PUT BHA ON PIPE RACKS.
	16:00 - 16:30	0.50	MIRU	01	C	P		PRE SPUD JOB SAFETY MEETING REVIEW DIRECTIONAL PLANS AND PLATS AND VERIFY LAT/LONGS AND WELL ORDER VERIFY DIRECTIONAL DRILLERS PLAN IS THE MOST RECENT AND APPROVED VERSION REFERENCE WELLBORE DIAGRAMS FOR EXACT CASING DESIGN AND GENERAL OVERVEW OF WELLBORE, PRIOR TO SPUD. FINISH PICKING UP BHA. PICK UP NOV 1.83 DEGREE BENT MOTOR (RUN #1) .17 REVALUTIONS PER GALLON SN (397214-5). PICK UP 12.25 REED DRILL BIT RUN 11 SN (A172023)
	16:30 - 18:00	1.50	DRLSUR	02	B	P	59	SPUD @ 05/12/2013 16:30. DRILL 12.25" HOLE 44'-210' (166', 110'/PER HR) 12.25" BIT ON 19th RUN. WEIGHT ON BIT 5-15 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF (BOTTOM) 800/600. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 20/20/20 K. DRAG 0 K. CIRCULATE CLOSED LOOP SYSTEM WITH 8.3# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. DRILL DOWN TO 210' WITH 6" DRILL COLLARS.
	18:00 - 19:30	1.50	DRLSUR	06	A	P	225	PRE JOB SAFETY MEETING, CIRC 15 MINUTES AND, TRIP OUT TO CHANGE ASSEMBLY. LAY DOWN 6" DRILL COLLARS, BREAK 12 1/4" BIT. MAKE UP REED 11" BIT (6TH RUN) (SN A172025) PICK UP 8" DIRECTIONAL ASSEMBLY. INSTALL EM TOOL, TRIP IN HOLE.

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 5/1/2013	End Date: 6/21/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	19:30 - 0:00	4.50	DRLSUR	02	B	P	225	DRILL 11". SURFACE HOLE 210'-960', (750', 166'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 900/700. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 50/40/45 K. DRAG 5 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 5' NORTH 4' RIGHT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES.
5/13/2013	0:00 - 6:00	6.00	DRLSUR	02	B	P	975	DRILL 11". SURFACE HOLE 960'-1370', (410', 68'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1200/1000. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 60/40/50 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 8.4' NORTH 2.62' RIGHT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES.
	6:00 - 12:00	6.00	DRLSUR	02	B	P	1385	DRILL 11". SURFACE HOLE 1370'-1970', (600', 100'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1400/1200. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 60/40/50 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 7.10' NORTH 6.07' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. PUTAIR ON THE HOLE @ 1800 CFM, @ 1400'.

Operation Summary Report

Well: NBU 1022-12P4CS RED

Spud Date: 5/12/2013

Project: UTAH-UINTAH

Site: NBU 1022-12P PAD

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

Event: DRILLING

Start Date: 5/1/2013

End Date: 6/21/2013

Active Datum: RKB @5,281.00usft (above Mean Sea Level)

UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:00 - 15:30	3.50	DRLSUR	02	B	P	1985	DRILL 11". SURFACE HOLE 1970'-2380', (410', 117'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1450/1200. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 60/40/50 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 5.77' NORTH 1.45' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. PUTAIR ON THE HOLE @ 1800 CFM, @ 1400'.
	15:30 - 17:30	2.00	DRLSUR	05	A	P		CIRCULATE AND CONDITION HOLE, VOLUME IS CLEAN COMING OVER SHAKERS, 4-400 BBL UPRIGHT'S FULL AND 2-400 BBL UPRIGHTS EMPTY, MUD TANKS FULL.
	17:30 - 20:30	3.00	CSGSUR	06	D	P		TRIP OUT OF HOLE, LAY DOWN DRILL STRING, BOTTOM HOLE ASSEMBLY, DIRECTIONAL TOOLS, MOTOR AND, BIT. CLEAR TOOL AREA.
	20:30 - 21:30	1.00	CSGSUR	06	D	P		PRE JOB SAFETY MEETING, MOVE PIPE RACKS AND CATWALK. PULL DIVERTER HEAD. RIG UP TO RUN SURFACE CASING. CLEAR UNRELATED TOOLS.
	21:30 - 23:30	2.00	CSGSUR	12	C	P		RUN 53 JOINTS OF 8-5/8". 28# J-55 LTC CASING. RAN 1 CENTRALIZER ON FIRST THREE JOINTS, AND EVERY OTHER JOINT FOR 2 JOINTS FOR A TOTAL OF 5 CENTRALIZERS. RUN A TOTAL OF 53 JOINTS. RUN CASING TO BOTTOM WITH NO PROBLEMS. SET FLOAT SHOE @ 2345.40' KB. SET TOP OF BAFFLE PLATE @ 2299.25' KB.
	23:30 - 0:00	0.50	CSGSUR	12	E	P		PRE JOB SAFETY MEETING, RAN 200' OF 1". PIPE DOWN BACK-SIDE OF CASING. PRESSURE TEST LINES TO 2000 PSI.

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013						
Project: UTAH-UINTAH			Site: NBU 1022-12P PAD			Rig Name No: PROPETRO 12/12, PIONEER 54/54		
Event: DRILLING			Start Date: 5/1/2013			End Date: 6/21/2013		
Active Datum: RKB @5,281.00usft (above Mean Sea Level)				UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/14/2013	0:00 - 1:00	1.00	CSGSUR	12	E	P		PRE JOB SAFETY MEETING, RELEASE RIG @ 05/14/2013 01:00 RAN 200' OF 1". PIPE DOWN BACK-SIDE OF CASING. PRESSURE TEST LINES TO 2000 PSI. PUMP 145 BBLS OF WATER AHEAD. MIX AND PUMP 20 BBLS OF 8.5# GEL WATER AHEAD. MIX AND PUMP (300 sx) 61.4 BBLS OF 15.8# 1.15 YIELD. DROP PLUG ON FLY, DISPLACE WITH 144.3 BBLS OF H2O, NO RETURNS THROUGH OUT JOB, FINAL LIFT OF 300 PSI AT 3 BBL/MINUTE. BUMP THE PLUG WITH 800 PSI, HELD 800 PSI FOR 5 MINUTES, TESTED FLOAT AND FLOAT HELD. SHUT DOWN AND WASH UP.
	1:00 - 1:00	0.00	CSGSUR	12	E	P		PUMP CEMENT DOWN ONE INCH PIPE WITH 150 sx (30.7 bbls.)SAME CEMENT NO CEMENT RETURNS TO SURFACE. SHUT DOWN AND WASH UP. WAIT 1.5 HOURS ON CEMENT, CEMENT DOWN BACKSIDE W/ 100 sx (20.4 bbls.) SAME CEMENT, 3 BBLS CEMENT RETURNS TO SURFACE. RIG DOWN CEMENTERS. (CEMENT JOB FINISHED @ 05/14/2012 03:00)
6/18/2013	0:00 - 7:00	7.00	RDMO	01	E	P	2395	RIG DOWN AND PREP FOR 1 MILE MOVE
	7:00 - 18:00	11.00	RDMO	01	A	P	2395	MOVE AND SET IN RIG,TRUCK RIG W/ WESTROC 8 TRUCKS-2 FORKLIFTS,1-PUSHER,1- SWAMPER 11 EXTRA-PIONEER HANDS,1 RIG PUSHER, 1-CRANE & 2 SWAMPERS
	18:00 - 0:00	6.00	RDMO	01	B	P	2395	RELEASE TRUCKS & CRANE @ 18:00 PM, RIG UP ROTARY TOOLS,FLOOR,FLOW LINES, TOPDRIVE, ST-80, STRAP BHA, TEST EQUIPMENT, FILL PITS
6/19/2013	0:00 - 1:00	1.00	PRSPD	09	A	P	2395	CUT & SLIP DRILL LINE
	1:00 - 2:00	1.00	PRSPD	14	A	P	2395	NIPPLE UP AND FUNCTION TEST BOPE
	2:00 - 5:30	3.50	PRSPD	15	A	P	2395	HELD SAFETY MEETING WITH RIG CREW & B & C TESTER, R/U & TEST BOPE, TEST PIPE RAMS, BLIND RAMS, INNER-OUTER BOP VALVES, CHOKE VALVES, FLOOR VALVES FOR 5 MIN 250 LOW, 10 MIN 5000 HIGH, ANN 5 MIN 250- 10 MIN 2500, SURFACE CASING 1500 FOR 30 MIN'S
	5:30 - 6:00	0.50	PRSPD	14	B	P	2395	INSTALL WEAR BUSHING,TIGHTEN TURN BUCKLES, PRE-SPUD INSPECTION
	6:00 - 10:30	4.50	PRSPD	06	A	P	2395	HELD SAFETY MEETING WITH RIG & P/U CREWS, RIG UP KIMZEY P/U SDI BHA & SCRIBE TOOLS, P/U 30 JTS HWDP, 40 JTS D/P TO TOP OF CEMENT @ 2279, R/D
	10:30 - 12:00	1.50	DRLPRC	02	F	P	2392	DRILL CEMENT & SHOE TRACK BAFFLE @2314', SHOE @2358' & NEW 7.875" HOLE TO 2395'

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 5/1/2013	End Date: 6/21/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:00 - 16:00	4.00	DRLPRC	02	B	P	2395	CLOSED LOOP SYSTEM DRILL F/2395 TO 3099', 704' @ 176' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.6 PPG VIS 32 TRQ ON/OFF = 9/6 K PSI ON /OFF 1800/1400 , DIFF 300-500 PU/SO/RT = 120-80-114 K SLIDE = 62' IN .48 HRS = 129.2' PH ROT = 642' IN 3.52 HRS = 182.4' PH NOV / 2-DEWATERING 6' LEFT & 12' LOW OF PLAN DRILL FLARE, 0 CONN FLARE 0
	16:00 - 16:30	0.50	DRLPRC	07	A	P	3099	SERVICE RIG
	16:30 - 19:30	3.00	DRLPRC	02	B	P	3099	CLOSED LOOP SYSTEM DRILL F/ 3099' TO 3755', 656' @ 218' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.6 PPG VIS 32 TRQ ON/OFF = 10-8 K PSI ON /OFF 2000/1650 , DIFF 300-500 PU/SO/RT = 130-90-120 K SLIDE = 46' IN .4 HRS = 115' ROT = 610' IN 2.6 HRS = 234.6' PH NOV / 2-DEWATERING 31' N & 7' W OF TARGET CENTER DRILL FLARE, 0 CONN FLARE 0
	19:30 - 0:00	4.50	DRLPRV	02	B	P	3755	CLOSED LOOP SYSTEM DRILL F/3755' TO 4900', 1145' @ 254.4' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.6 PPG VIS 32 TRQ ON/OFF = 12/10 K PSI ON /OFF 2000/1650 , DIFF 300-500 PU/SO/RT = 120-80-114 K SLIDE = 33' IN .34 HRS = 97' PH ROT = 1112' IN 4.16 HRS = 267.3' PH NOV / 2-DEWATERING 10' N & 3' W OF TARGET CENTER DRILL FLARE, 0 CONN FLARE 0

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 5/1/2013	End Date: 6/21/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/20/2013	0:00 - 8:00	8.00	DRLPRV	02	B	P	4900	CLOSED LOOP SYSTEM DRILL F/ 4900' TO 6322', 1422' @ 177.7' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.8 PPG VIS 32 TRQ ON/OFF = 12/10 K PSI ON /OFF 2200/1650 , DIFF 300-500 PU/SO/RT = 150-120-135 K SLIDE = 42' IN .51 HRS = 82.4' PH ROT = 1380' IN 7.49 HRS = 184.2' PH NOV / 2-DEWATERING 3' N & 6' W OF TARGET CENTER DRILL FLARE, 0 CONN FLARE 0 BOP DRILL = 69 SEC
	8:00 - 11:00	3.00	DRLPRV	02	B	P	6322	CLOSED LOOP SYSTEM DRILL F/ 6322' TO 6797', 475' @ 158.3' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.8 PPG VIS 32 TRQ ON/OFF = 12/10 K PSI ON /OFF 2200/1650 , DIFF 300-500 PU/SO/RT = 150-120-135 K SLIDE = 27' IN .34 HRS = 79.4' PH ROT = 448' IN 2.66 HRS = 168.4' PH NOV / 2-DEWATERING 4.5 N & 10.5 W OF TARGET CENTER DRILL FLARE, 0 CONN FLARE 0
	11:00 - 11:30	0.50	DRLPRV	08	A	Z	6797	*** LAYDOWN 2 JTS (WASHED FACE'S)
	11:30 - 16:00	4.50	DRLPRV	02	B	P	6797	CLOSED LOOP SYSTEM DRILL F/ 6797' TO 7467', 670' @ 148.8' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.8 PPG VIS 32 TRQ ON/OFF = 12/10 K PSI ON /OFF 2200/1650 , DIFF 300-500 PU/SO/RT = 150-120-135 K SLIDE = 39' IN .51 HRS = 76.5' PH ROT = 631' IN 3.99 HRS = 158.1' PH NOV / 2-DEWATERING 12' N & 14' W OF TARGET CENTER DRILL FLARE, 0 CONN FLARE 0
	16:00 - 16:30	0.50	DRLPRV	07	A	P	7467	SERVICE RIG

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 5/1/2013	End Date: 6/21/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	16:30 - 23:30	7.00	DRLPRV	02	B	P	7467	CLOSED LOOP SYSTEM DRILL F/7467' TO 8378', 911' @ 130.1' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 200 GPM 586 MW 8.8 PPG VIS 32 TRQ ON/OFF = 15/12 K PSI ON /OFF 2200/1650 , DIFF 300-500 PU/SO/RT = 180-140-155 K SLIDE = 0 ROT = 100% NOV / 2-DEWATERING 5.5' W & 15' S OF TARGET CENTER DRILL FLARE, 5 CONN FLARE 10
	23:30 - 0:00	0.50	DRLPRV	05	G	P	8378	DISPLACE HOLE WITH 11.8 PPG 40 VIS MUD
6/21/2013	0:00 - 1:30	1.50	DRLPRV	02	B	P	8525	CLOSED LOOP SYSTEM DRILL F/ 8378' TO 8525', 147' @ 98' PH WOB / 20-24 RPM TOP DRIVE 55-60, MM 135 (2 PUMPS) - SPM 180 GPM MW 11.9 PPG VIS 40 TRQ ON/OFF = 13/11 K PSI ON /OFF 2200/1650 , DIFF 300-500 PU/SO/RT = 180-140-155 K SLIDE = 0 ROT = 100% NOV / 2-DEWATERING 5.5' W & 15' S OF TARGET CENTER DRILL FLARE, 5 CONN FLARE 10 TD WELL @ 01:30 6/21/13
	1:30 - 2:30	1.00	DRLPRV	05	C	P	8525	CIRC & COND WELL FOR SHORT TRIP
	2:30 - 3:30	1.00	DRLPRV	06	E	P	8525	SHORT TRIP 10 STANDS, NO PROBLEMS, LOST 10 BBLs ON TRIP
	3:30 - 4:30	1.00	DRLPRV	05	C	P	8525	CIRC & COND HOLE FOR TRIP OUT TO RUN CASING
	4:30 - 8:00	3.50	DRLPRV	06	D	P	8525	TRIP OUT WITH NO PROBLEMS TO RUN PROD CASING
	8:00 - 8:30	0.50	DRLPRV	14	B	P	8525	PULL WEAR BUSHING
	8:30 - 15:30	7.00	DRLPRV	12	C	P	8525	HELD SAFETY MEETING WITH KIMZEY CASING & RIG CREWS, R/U & RAN / 194 TOTAL JOINTS OF CASING(80 JOINTS OF 4.5"/11.6#/1-80 + 1 MARKER) +(112 JOINTS OF 4.5"/11.6#/1-80/DQX) + (1-DQXCROSSOVER)/LANDED SHOE @ 8506.89'/FLOAT COLLOR @ 8461'/MEASA VERDE MARKER @ 8295'/DQX X 8 RND LT&C X-OVER JOINT @ 4969'
	15:30 - 17:00	1.50	DRLPRV	05	D	P	8525	TRY TO WORK STUCK CASING FREE 10' OFF BOTTOM, 200K UP & 35 DOWN NO MOVEMENT CIRCULATED BOTTOMS UP 120 SPM / 600 / 352 5 BBLs FLUID LOST WHILE CIRCULATING BOTTOMS UP NO FURTHER LOSSES PRIOR TO CEMENT JOB 0' FLARE ON BOTTOMS UP FOR
	17:00 - 17:30	0.50	DRLPRV	07	A	P	8525	SERVICE RIG

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: PROPETRO 12/12, PIONEER 54/54
Event: DRILLING		Start Date: 5/1/2013	End Date: 6/21/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	17:30 - 22:00	4.50	DRLPRV	12	E	P	8525	HELD SAFETY MEETING WITH RIG & CEMENTING CREWS, TEST LINES TO 5000, DROP BOTTOM PLUG, PUMP 25 BBLS WATER SPACER, LEAD 15% EXCESS, 162.47 BBLS (470) SACKS 12.5 PPG 1.98 YLD,PLII +6%GELL +5#skKS +.4%FL52 +.2%SMS +.4% R-3+5#/skSF + 1/4#skCF TAIL 15% EXCESS, 224.38 BBLS (970) SACKS 14.3 PPG 1.32 YLD,50/50 poz+2%gell+0.55% R-3 + 10%salt+5#blnd S.F.75%SMS SHUT DOWN CLEAN LINES, DROP TOP PLUG & DISPLACE WITH 131.6 BBLS CLAYCARE WATER, BUMP PLUG @3400 PSI, 700 OVER FINAL LIFT OF 2700 PSI, FLOATS HELD, FULL RETURNS THRU OUT JOB WITH 20 BBLS SPACER BACK TO SURFACE NO CEMENT, 1.5 BBLS BACK TO TRUCK, EST TOP OF TAIL 3686', LEAD-50', FLUSH LINES & STACK , R/D
	22:00 - 0:00	2.00	DRLPRV	14	A	P	8525	PICKUP STACK & SET EMERGENCY SLIPS WITH CAMERON, CUT OFF 7.5' AND RELOAD HANGER,NIPPLE DOWN BOP,SAVE MUD AND PREP FOR SKID MOVE TO NBU 1022-12I4CS,RELEASE RIG 23:59 6/21/2013

US ROCKIES REGION

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 1022-12P4CS RED	Wellbore No.	OH
Well Name	NBU 1022-12P4CS	Wellbore Name	NBU 1022-12P4CS
Report No.	1	Report Date	8/12/2013
Project	UTAH-UJINTAH	Site	NBU 1022-12P PAD
Rig Name/No.		Event	COMPLETION
Start Date	8/6/2013	End Date	8/23/2013
Spud Date	5/12/2013	Active Datum	RKB @5,281.00usft (above Mean Sea Level)
UWI	SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0		

1.3 General

Contractor		Job Method	Supervisor
Perforated Assembly		Conveyed Method	

1.4 Initial Conditions

Fluid Type	Fluid Density	Gross Interval	5,706.0 (usft)-8,299.0 (usft)	Start Date/Time	8/12/2013 12:00AM
Surface Press	Estimate Res Press	No. of Intervals	54	End Date/Time	8/12/2013 12:00AM
TVD Fluid Top	Fluid Head	Total Shots	198	Net Perforation Interval	59.00 (usft)
Hydrostatic Press	Press Difference	Avg Shot Density	3.36 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL			Final Press Date	

1.5 Summary

Fluid Density	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
Estimate Res Press	4.00		0.360	EXP/	3.375	90.00	23.00	PRODUCTIO	N	

2 Intervals

2.1 Perforated Interval

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
8/12/2013 12:00AM	WASATCH/			5,706.0	5,707.0	4.00		0.360	EXP/	3.375	90.00	23.00	PRODUCTIO	N	

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
8/12/2013 12:00AM	WASATCH/			5,797.0	5,799.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	WASATCH/			5,823.0	5,825.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	WASATCH/			5,896.0	5,897.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	WASATCH/			5,910.0	5,911.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	WASATCH/			6,005.0	6,006.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	WASATCH/			6,057.0	6,059.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			6,513.0	6,514.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			6,669.0	6,670.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			6,705.0	6,706.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			6,771.0	6,772.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			6,781.0	6,782.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			6,864.0	6,865.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,021.0	7,022.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,034.0	7,035.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,096.0	7,097.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,115.0	7,116.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,136.0	7,138.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,233.0	7,234.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,250.0	7,251.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,270.0	7,271.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,307.0	7,308.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

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
8/12/2013 12:00AM	MESAVERDE/			7,341.0	7,342.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,355.0	7,356.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,376.0	7,377.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,391.0	7,392.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,425.0	7,426.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,433.0	7,434.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,446.0	7,447.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,459.0	7,460.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,478.0	7,479.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,517.0	7,518.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,596.0	7,597.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,643.0	7,644.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,713.0	7,714.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,733.0	7,734.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,748.0	7,749.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,763.0	7,764.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,792.0	7,793.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,806.0	7,807.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,843.0	7,844.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,862.0	7,863.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,894.0	7,895.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

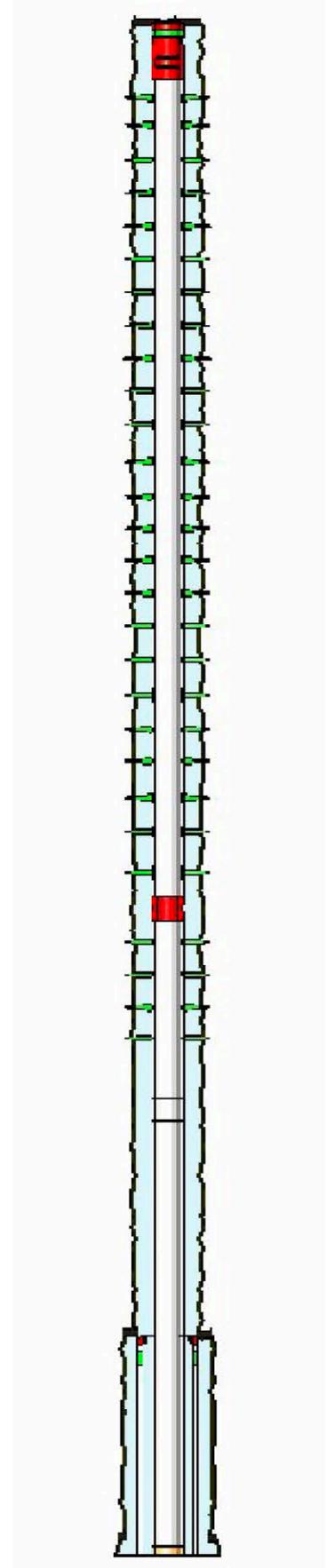
US ROCKIES REGION

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	Misruin
8/12/2013 12:00AM	MESAVERDE/			7,922.0	7,923.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,943.0	7,944.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,969.0	7,970.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			7,992.0	7,993.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,009.0	8,010.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,062.0	8,063.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,095.0	8,096.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,109.0	8,110.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,255.0	8,256.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,290.0	8,291.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N
8/12/2013 12:00AM	MESAVERDE/			8,297.0	8,299.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO	N

3 Plots

3.1 Wellbore Schematic



US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-12P4CS RED				Spud Date: 5/12/2013			
Project: UTAH-UINTAH			Site: NBU 1022-12P PAD			Rig Name No: MILES 3/3	
Event: COMPLETION			Start Date: 8/6/2013		End Date: 8/23/2013		
Active Datum: RKB @5,281.00usft (above Mean Sea Level)				UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
7/12/2013	-							
8/6/2013	7:00 - 8:00	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 140 PSI. 2ND PSI TEST T/7000 PSI. HELD FOR 15 MIN LOST 68 PSI NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. PRESSURE TEST 8 5/8 X 4 1/2 TO 529 PSI HELD FOR 5 MIN LOST -24 PSI,BLED PSI OFF, REINSTALLED POP OFF SWIFN NO PRESSURE ON SURFACE CASING FILLED SURFACE WITH 1 BBL H2O
8/9/2013	7:00 - 7:15	0.25	SUBSPR	48	B	P		HSM, REVIEW RIGGING UP,
	7:15 - 7:15	0.00	SUBSPR	37	B	P		MIRU CASED HOLE SOLUTIONS, PERFORTE THE MESA VERDE STG #1 AS PERSAY IN PROCEDURE
8/13/2013	6:15 - 6:30	0.25		48		P		HSM,

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: MILES 3/3
Event: COMPLETION		Start Date: 8/6/2013	End Date: 8/23/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 17:00	10.00	FRAC	36	B	P		<p>REFER TO STIMULATION PJR FOR FLUID, SAND AND CHEMICAL VOLUMES, ALL STAGES WERE PERFORATED ACCORDING TO PERF RECORD IN OPEN WELLS, ALL STAGES WERE STIMULATED TO VENDOR POST JOB REPORT. ALL PLUGS ARE HALIBURTON 8K CBPS</p> <p>PRESSURE TEST TO 8788 LOST 1364 IN 15 MINUTES, POP OFFS SET AT 6800</p> <p>FRAC STG #1] WHP=1341#, BRK DN PERFS=4002#, @=3.9 BPM, INTIAL ISIP=2431#, FG=.75, FINAL ISIP=2462#, FG=.74,</p> <p>SET PLUG & PERFORATE STG #2</p> <p>FRAC STG #2] WHP=2195#, BRK DN PERFS=2597#, @=3.6 BPM, INTIAL ISIP=2261#, FG=.72, FINAL ISIP=2613#, FG=.77,</p> <p>SET PLUG & PERFORATE STG #3</p> <p>FRAC STG #3] WHP=2214#, BRK DN PERFS=3138#, @=4.7 BPM, INTIAL ISIP=2469#, FG=.76, FINAL ISIP=2665#, FG=.78,</p> <p>SET PLUG & PERFORATE STG #4</p> <p>FRAC STG #4] WHP=1212#, BRK DN PERFS=4031#, @=4.3 BPM, INTIAL ISIP=1783#, FG=.68, FINAL ISIP=1924#, FG=.70,</p> <p>SET PLUG PERFORATE STG #5</p> <p>FRAC STG #5] WHP=1603#, BRK DN PERFS=2165#, @=4.0 BPM, INTIAL ISIP=1634#, FG=.66, FINAL ISIP=2005#, FG=.71,</p> <p>SET PLUG AND PERFORATE STG #6</p>
8/14/2013	6:30 - 6:45	0.25		48		P		HSM,

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: MILES 3/3
Event: COMPLETION		Start Date: 8/6/2013	End Date: 8/23/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 14:33	7.55		36	B	P		FRAC STG #6] WHP=243#, BRK DN PERFS=3516#, @=4.2 BPM, INTIAL ISIP=1855#, FG=.70, FINAL ISIP=2457#, FG=.79, SET PLUG AND PERFORATE STG #7 FRAC STG #7] WHP=1182#, BRK DN PERFS=2027#, @=2.2 BPM, INTIAL ISIP=1511#, FG=.67, FINAL ISIP=2082#, FG=.75, SET PLUUG AND PERFORATE STG #8 FRAC STG #8] WHP=328#, BRK DN PERFS=2890#, @=3.4 BPM, INTIAL ISIP=1473#, FG=.69, FINAL ISIP=1952#, FG=.77, SET PLUG AND PERFORATE STG #9 FRAC STG #9] WHP=801#, BRK DN PERFS=3856#, @=4.5 BPM, INTIAL ISIP=1879#, FG=.76, FINAL ISIP=1628#, FG=.72, SET TOP KILL TOTAL BBLS=10277 TOTAL SAND=235604
8/22/2013	7:00 - 7:30	0.50	DRLOUT	48		P		HSM, PICKING UP TBG OFF FLOAT.
	7:30 - 15:00	7.50	DRLOUT	31	I	P		TALLY & PU 37/8 BIT, POBS, 1.875 X/N, 150 JTS J-55, 6' L-80 PUP, 31 JTS 23/8 L-80, TAG UP @ 5650', RU DRLG EQUIP FILL CSG TEST BOPS TO 3,000 PSI, PREP TO D/O 8/23/13, SWI SDFN.
8/23/2013	7:00 - 7:30	0.50	DRLOUT	48		P		HSM, WATCHING FOR LEAKS WHILE DRILLING OUT PLUGS.

Operation Summary Report

Well: NBU 1022-12P4CS RED		Spud Date: 5/12/2013	
Project: UTAH-UINTAH		Site: NBU 1022-12P PAD	Rig Name No: MILES 3/3
Event: COMPLETION		Start Date: 8/6/2013	End Date: 8/23/2013
Active Datum: RKB @5,281.00usft (above Mean Sea Level)		UWI: SE/SE/0/10/S/22/E/12/0/0/26/PM/S/1115/E/0/442/0/0	

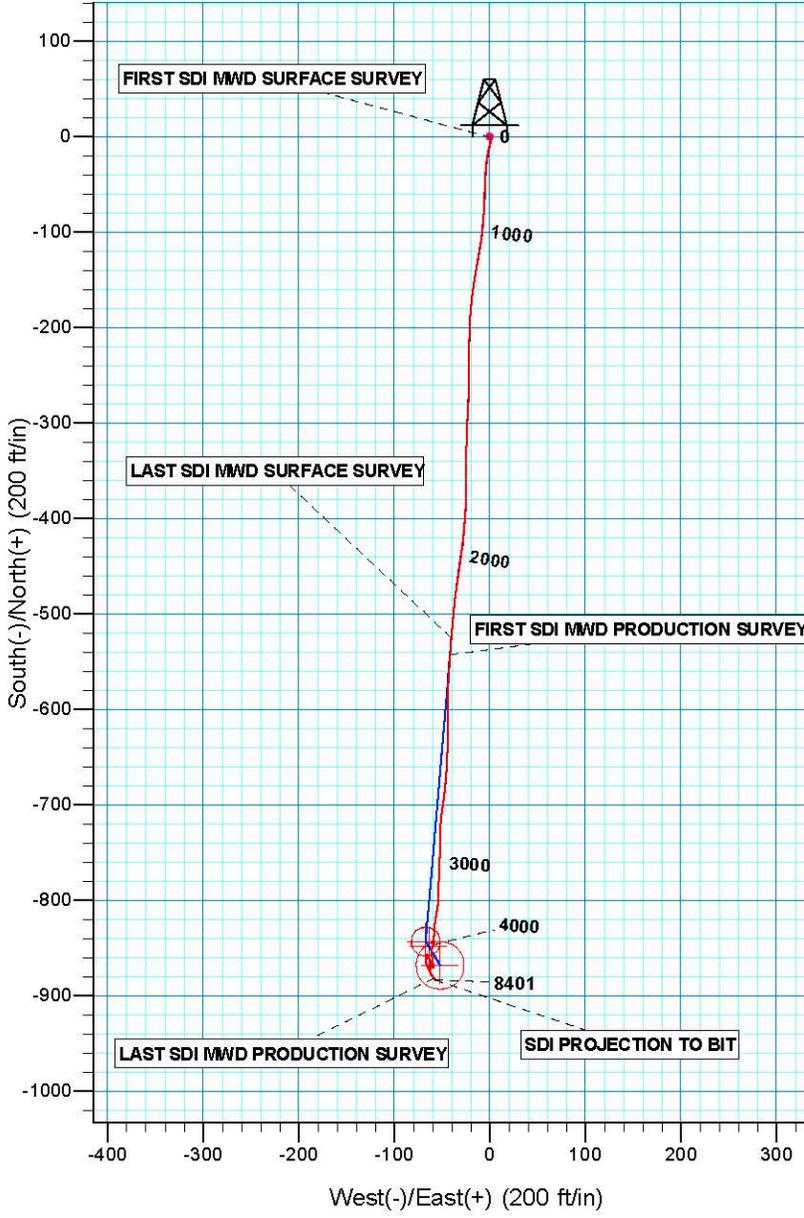
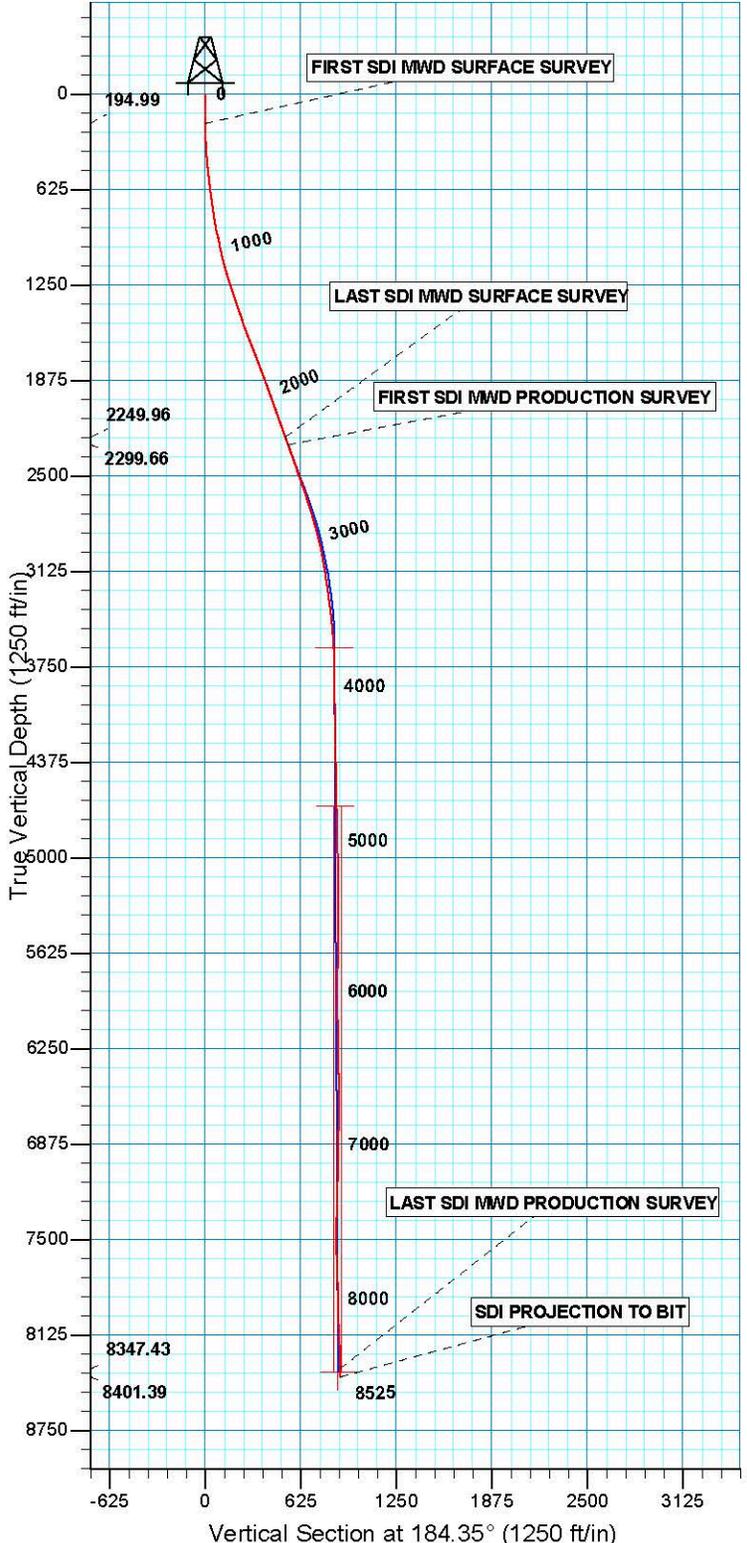
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:30 - 17:00	9.50	DRLOUT	44	C	P		<p>BROKE CIRC CONV, RIH.</p> <p>C/O 15' SAND TAG 1ST PLUG @ 5656' DRL PLG IN 12 MIN, 200 PSI INCREASE RIH.</p> <p>C/O 30' SAND TAG 2ND PLUG @ 5855' DRL PLG IN 10 MIN, 100 PSI INCREASE RIH.</p> <p>C/O 40' SAND TAG 3RD PLUG @ 6089' DRL PLG IN 15 MIN, 300 PSI INCREASE RIH.</p> <p>C/O 28' SAND TAG 4TH PLUG @ 6812' DRL PLG IN 12 MIN, 300 PSI INCREASE RIH.</p> <p>C/O 25' SAND TAG 5TH PLUG @ 7168' DRL PLG IN 20 MIN, 500 PSI INCREASE RIH.</p> <p>C/O 25' SAND TAG 6TH PLUG @ 7415' DRL PLG IN 15 MIN, 300 PSI INCREASE RIH.</p> <p>C/O 30' SAND TAG 7TH PLUG @ 7548' DRL PLG IN 14 MIN, 500 PSI INCREASE RIH.</p> <p>C/O 25' SAND TAG 8TH PLUG @ 7833' DRL PLG IN 18 MIN, 300 PSI INCREASE RIH.</p> <p>C/O 30' SAND TAG 9TH PLUG @ 8040' DRL PLG IN 15 MIN, 500 PSI INCREASE RIH.</p> <p>(NOTE WELL WAS HARD DRILLING 20 DEGS IN S CURVE)</p> <p>C/O TO 8419', CIRC CLN, RD SWIVEL, L/D 19 JTS, LAND TBG, ND BOPS NU WH, PUMPED OFF BIT, TURN WELL TO FB CREW. SDFWE.</p> <p>KB = 19'</p> <p>41/16 HANGER = .83' (SURFACE VALVE OPEN & LOCKED)</p> <p>98 JTS 23/8 L-80 = 3113.84'</p> <p>SICP FTP</p> <p>6' L-80 PUP JT = 6.13'</p> <p>150 JTS 23/8 J-55 = 4676.98'</p> <p>POBS W/ 1.875 X/N = 2.20'</p> <p>EOT @ 7818.98'</p> <p>TWTR 10,757 BBLS</p> <p>TWR 1300 BBLS</p> <p>TWLTR 9457 BBLS</p> <p>316 JTS HAULED OUT 150 J-55, 166 L-80</p> <p>248 LANDED</p> <p>68 TO RETURN</p>
	17:00 - 17:00	0.00	DRLOUT	50				<p>WELL TURNED TO SALES @ 1600 HR ON 8/23/2013. 2700 MCFD, 1560 BWPD, FCP 2200#, FTP 2100#, 20/64" CK.</p>



WELL DETAILS: NBU 1022-12P4CS					
GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14515337.26	2094456.85	39.959271	-109.379766

Azimuths to True North
Magnetic North: 11.00°

Magnetic Field
Strength: 52303.4snT
Dip Angle: 65.85°
Date: 08/19/2011
Model: IGRF2010



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 106 W)
Location:	SECTION 12 T10S R22E
System Datum:	Mean Sea Level

RECEIVED: 2013



Scientific Drilling

US ROCKIES REGION PLANNING

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

NBU 1022-12P PAD

NBU 1022-12P4CS

OH

Design: OH

Standard Survey Report

23 July, 2013





Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Site:	NBU 1022-12P PAD	MD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Well:	NBU 1022-12P4CS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

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 1022-12P PAD, SECTION 12 T10S R22E				
Site Position:		Northing:	14,515,334.19 usft	Latitude:	39.959263
From:	Lat/Long	Easting:	2,094,447.37 usft	Longitude:	-109.379800
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.04 °

Well	NBU 1022-12P4CS, 1115 FSL 442 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,515,337.26 usft	Latitude:	39.959271
	+E/-W	0.00 ft	Easting:	2,094,456.84 usft	Longitude:	-109.379766
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,262.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/19/11	11.00	65.85	52,303

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	184.35	

Survey Program	Date	07/23/13			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
15.00	2,330.00	Survey #1 SDI MWD SURFACE (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,330.00	8,525.00	Survey #2 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
195.00	1.09	123.57	194.99	-0.95	1.43	0.84	0.61	0.61	0.61	0.00
FIRST SDI MWD SURFACE SURVEY										
282.00	2.20	191.48	281.96	-3.04	1.78	2.90	2.36	1.28	1.28	78.06
369.00	3.61	195.87	368.84	-7.31	0.70	7.24	1.64	1.62	1.62	5.05
463.00	5.52	192.79	462.54	-14.57	-1.11	14.61	2.05	2.03	2.03	-3.28
553.00	6.68	188.84	552.03	-23.96	-2.87	24.11	1.37	1.29	1.29	-4.39
643.00	7.65	183.30	641.33	-35.12	-4.02	35.32	1.32	1.08	1.08	-6.16
733.00	8.61	183.24	730.42	-47.82	-4.75	48.04	1.07	1.07	1.07	-0.07



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Site:	NBU 1022-12P PAD	MD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Well:	NBU 1022-12P4CS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

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)	
823.00	9.43	182.32	819.31	-61.92	-5.42	62.15	0.93	0.91	-1.02	
913.00	10.58	181.95	907.94	-77.54	-6.00	77.77	1.28	1.28	-0.41	
1,003.00	12.05	186.82	996.19	-95.13	-7.40	95.42	1.95	1.63	5.41	
1,093.00	14.25	189.63	1,083.83	-115.38	-10.37	115.83	2.54	2.44	3.12	
1,183.00	16.18	189.28	1,170.67	-138.68	-14.25	139.36	2.15	2.14	-0.39	
1,273.00	17.67	187.61	1,256.77	-164.59	-18.08	165.49	1.74	1.66	-1.86	
1,363.00	18.82	183.04	1,342.24	-192.63	-20.66	193.64	2.04	1.28	-5.08	
1,453.00	18.82	180.23	1,427.43	-221.64	-21.48	222.64	1.01	0.00	-3.12	
1,543.00	19.96	180.40	1,512.33	-251.52	-21.65	252.44	1.27	1.27	0.19	
1,633.00	21.81	183.30	1,596.41	-283.58	-22.72	284.49	2.35	2.06	3.22	
1,723.00	20.90	181.55	1,680.23	-316.32	-24.12	317.24	1.23	-1.01	-1.94	
1,813.00	20.75	180.40	1,764.36	-348.31	-24.66	349.18	0.48	-0.17	-1.28	
1,903.00	20.84	180.67	1,848.49	-380.26	-24.96	381.06	0.15	0.10	0.30	
1,993.00	20.29	185.56	1,932.76	-411.80	-26.66	412.64	2.00	-0.61	5.43	
2,083.00	19.75	188.67	2,017.33	-442.37	-30.46	443.40	1.33	-0.60	3.46	
2,173.00	19.61	187.70	2,102.07	-472.37	-34.78	473.64	0.39	-0.16	-1.08	
2,263.00	19.35	184.62	2,186.92	-502.19	-38.00	503.63	1.18	-0.29	-3.42	
2,330.00	20.22	185.15	2,249.96	-524.79	-39.94	526.31	1.33	1.30	0.79	
LAST SDI MWD SURFACE SURVEY										
2,383.00	20.49	184.26	2,299.66	-543.16	-41.45	544.74	0.78	0.51	-1.68	
FIRST SDI MWD PRODUCTION SURVEY										
2,478.00	19.52	183.29	2,388.92	-575.59	-43.59	577.24	1.08	-1.02	-1.02	
2,572.00	18.03	178.37	2,477.92	-605.81	-44.08	607.41	2.31	-1.59	-5.23	
2,667.00	18.05	181.65	2,568.26	-635.22	-44.09	636.74	1.07	0.02	3.45	
2,762.00	18.82	183.64	2,658.38	-665.23	-45.48	666.76	1.05	0.81	2.09	
2,857.00	17.15	187.68	2,748.74	-694.40	-48.33	696.07	2.19	-1.76	4.25	
2,952.00	15.65	184.87	2,839.87	-721.05	-51.29	722.87	1.79	-1.58	-2.96	
3,046.00	12.49	179.51	2,931.05	-743.86	-52.28	745.68	3.63	-3.36	-5.70	
3,141.00	11.70	183.29	3,023.94	-763.75	-52.74	765.55	1.18	-0.83	3.98	
3,236.00	9.67	179.86	3,117.29	-781.34	-53.28	783.13	2.24	-2.14	-3.61	
3,330.00	8.27	181.71	3,210.13	-796.00	-53.46	797.76	1.52	-1.49	1.97	
3,425.00	8.09	192.52	3,304.17	-809.35	-55.11	811.20	1.63	-0.19	11.38	
3,521.00	6.07	187.24	3,399.44	-820.98	-57.22	822.96	2.21	-2.10	-5.50	
3,616.00	4.84	179.25	3,494.01	-829.98	-57.80	831.97	1.52	-1.29	-8.41	
3,712.00	3.87	187.86	3,589.73	-837.23	-58.19	839.24	1.22	-1.01	8.97	
3,806.00	2.55	194.63	3,683.58	-842.40	-59.15	844.46	1.46	-1.40	7.20	
3,901.00	0.44	150.33	3,778.54	-844.76	-59.50	846.84	2.37	-2.22	-46.63	
3,996.00	0.70	157.36	3,873.54	-845.61	-59.10	847.66	0.28	0.27	7.40	
4,091.00	0.79	154.99	3,968.53	-846.74	-58.60	848.75	0.10	0.09	-2.49	
4,186.00	0.79	255.80	4,063.53	-847.50	-58.96	849.53	1.28	0.00	106.12	
4,281.00	0.62	243.23	4,158.52	-847.89	-60.05	850.00	0.24	-0.18	-13.23	
4,375.00	0.62	168.70	4,252.51	-848.62	-60.41	850.75	0.80	0.00	-79.29	
4,469.00	0.97	189.53	4,346.51	-849.90	-60.44	852.04	0.48	0.37	22.16	



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Site:	NBU 1022-12P PAD	MD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Well:	NBU 1022-12P4CS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,566.00	1.32	185.14	4,443.49	-851.82	-60.67	853.97	0.37	0.36	-4.53	
4,658.00	1.14	174.85	4,535.47	-853.79	-60.69	855.93	0.31	-0.20	-11.18	
4,753.00	1.41	177.75	4,630.44	-855.90	-60.56	858.03	0.29	0.28	3.05	
4,848.00	1.23	170.37	4,725.42	-858.07	-60.34	860.18	0.26	-0.19	-7.77	
4,943.00	1.41	175.47	4,820.39	-860.24	-60.08	862.32	0.23	0.19	5.37	
5,038.00	1.58	177.49	4,915.36	-862.72	-59.93	864.78	0.19	0.18	2.13	
5,133.00	1.41	161.93	5,010.33	-865.14	-59.51	867.16	0.46	-0.18	-16.38	
5,228.00	1.76	175.47	5,105.29	-867.70	-59.03	869.68	0.54	0.37	14.25	
5,322.00	1.41	175.64	5,199.25	-870.29	-58.83	872.25	0.37	-0.37	0.18	
5,417.00	0.44	308.71	5,294.25	-871.23	-59.02	873.20	1.83	-1.02	140.07	
5,512.00	0.88	320.22	5,389.24	-870.44	-59.77	872.47	0.48	0.46	12.12	
5,606.00	1.67	354.41	5,483.22	-868.52	-60.37	870.60	1.13	0.84	36.37	
5,701.00	1.06	349.40	5,578.19	-866.28	-60.67	868.39	0.65	-0.64	-5.27	
5,796.00	0.79	346.68	5,673.18	-864.78	-60.98	866.92	0.29	-0.28	-2.86	
5,891.00	0.26	313.89	5,768.17	-864.00	-61.28	866.15	0.62	-0.56	-34.52	
5,986.00	0.26	302.73	5,863.17	-863.73	-61.62	865.92	0.05	0.00	-11.75	
6,080.00	0.35	220.99	5,957.17	-863.83	-61.99	866.04	0.43	0.10	-86.96	
6,175.00	0.38	205.57	6,052.17	-864.33	-62.32	866.57	0.11	0.03	-16.23	
6,271.00	0.53	195.24	6,148.17	-865.05	-62.57	867.30	0.18	0.16	-10.76	
6,366.00	0.79	191.38	6,243.16	-866.12	-62.81	868.39	0.28	0.27	-4.06	
6,460.00	0.97	171.16	6,337.15	-867.54	-62.82	869.80	0.38	0.19	-21.51	
6,555.00	1.23	183.20	6,432.13	-869.35	-62.75	871.61	0.36	0.27	12.67	
6,650.00	1.49	173.01	6,527.10	-871.59	-62.66	873.84	0.37	0.27	-10.73	
6,744.00	0.09	77.03	6,621.09	-872.79	-62.44	875.01	1.60	-1.49	-102.11	
6,839.00	0.35	21.39	6,716.09	-872.50	-62.26	874.71	0.32	0.27	-58.57	
6,934.00	1.32	15.95	6,811.08	-871.18	-61.85	873.36	1.02	1.02	-5.73	
7,029.00	1.06	42.49	6,906.06	-869.48	-60.96	871.60	0.63	-0.27	27.94	
7,122.00	1.49	343.34	6,999.04	-867.69	-60.73	869.79	1.41	0.46	-63.60	
7,216.00	2.02	341.23	7,093.00	-864.95	-61.61	867.13	0.57	0.56	-2.24	
7,311.00	1.85	332.26	7,187.94	-862.01	-62.86	864.29	0.37	-0.18	-9.44	
7,406.00	1.49	337.54	7,282.90	-859.51	-64.05	861.89	0.41	-0.38	5.56	
7,500.00	0.97	313.72	7,376.88	-857.83	-65.09	860.29	0.76	-0.55	-25.34	
7,594.00	0.35	278.39	7,470.88	-857.24	-65.95	859.77	0.76	-0.66	-37.59	
7,686.00	0.88	181.53	7,562.87	-857.90	-66.24	860.46	1.07	0.58	-105.28	
7,781.00	1.58	185.49	7,657.85	-859.93	-66.39	862.49	0.74	0.74	4.17	
7,875.00	1.85	184.17	7,751.81	-862.74	-66.62	865.31	0.29	0.29	-1.40	
7,969.00	1.58	173.71	7,845.77	-865.54	-66.59	868.10	0.44	-0.29	-11.13	
8,026.00	1.85	157.10	7,902.74	-867.17	-66.15	869.69	0.99	0.47	-29.14	
8,155.00	1.93	156.48	8,031.67	-871.08	-64.47	873.46	0.06	0.06	-0.48	
8,249.00	2.20	152.00	8,125.61	-874.12	-62.99	876.38	0.33	0.29	-4.77	
8,343.00	2.29	152.09	8,219.54	-877.38	-61.27	879.49	0.10	0.10	0.10	
8,438.00	2.37	141.63	8,314.46	-880.59	-59.16	882.54	0.45	0.08	-11.01	
8,471.00	2.29	146.99	8,347.43	-881.68	-58.38	883.57	0.70	-0.24	16.24	

LAST SDI MWD PRODUCTION SURVEY



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-12P4CS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Site:	NBU 1022-12P PAD	MD Reference:	GL 5262 & KB 19 @ 5281.00ft (PIONEER 54)
Well:	NBU 1022-12P4CS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

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)
8,525.00	2.29	146.99	8,401.39	-883.49	-57.20	885.28	0.00	0.00	0.00
SDI PROJECTION TO BIT									

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
DTGT_NBU 1022-12P4C - hit/miss target - Shape - Circle (radius 15.00)	0.00	0.00	3,628.60	-843.29	-66.86	14,514,492.90	2,094,405.31	39.956956	-109.380005
- actual wellpath misses target center by 9.06ft at 3751.23ft MD (3628.88 TVD, -839.66 N, -58.57 E)									
TOC @ 4660.00 (NBU 1) - actual wellpath misses target center by 8.75ft at 4782.37ft MD (4659.81 TVD, -856.61 N, -60.52 E) - Point	0.00	0.00	4,660.00	-848.48	-63.74	14,514,487.77	2,094,408.52	39.956941	-109.379994
PBHL_NBU 1022-12P4C - actual wellpath misses target center by 25.40ft at 8471.00ft MD (8347.43 TVD, -881.68 N, -58.38 E) - Circle (radius 25.00)	0.00	0.00	8,368.00	-868.28	-51.86	14,514,468.18	2,094,420.77	39.956887	-109.379951

Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
195.00	194.99	-0.95	1.43	FIRST SDI MWD SURFACE SURVEY
2,330.00	2,249.96	-524.79	-39.94	LAST SDI MWD SURFACE SURVEY
2,383.00	2,299.66	-543.16	-41.45	FIRST SDI MWD PRODUCTION SURVEY
8,471.00	8,347.43	-881.68	-58.38	LAST SDI MWD PRODUCTION SURVEY
8,525.00	8,401.39	-883.49	-57.20	SDI PROJECTION TO BIT

Checked By: _____ Approved By: _____ Date: _____

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: UT ST UO 01197-	
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
1. TYPE OF WELL Gas Well		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		8. WELL NAME and NUMBER: NBU 1022-12P4CS	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047519470000	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1115 FSL 0442 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE 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"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/26/2013	<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.			
FINISHED DRILLING TO 8525 ON 6/21/2013. CEMENTED PRODUCTION CASING. RELEASED PIONEER 54 RIG ON 6/22/2013. 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 27, 2013			
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist	
SIGNATURE N/A		DATE 11/26/2013	