

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING				FORM 3 AMENDED REPORT <input checked="" type="checkbox"/>		
APPLICATION FOR PERMIT TO DRILL				1. WELL NAME and NUMBER NBU 921-35G4BS		
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 720 929-6007		
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217				9. OPERATOR E-MAIL Kathy.SchneebeckDulnoan@anadarko.com		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML 22582		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	2053 FNL 1643 FEL	SWNE	35	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	2250 FNL 1822 FEL	SWNE	35	9.0 S	21.0 E	S
At Total Depth	2250 FNL 1822 FEL	SWNE	35	9.0 S	21.0 E	S
21. COUNTY UINTAH		22. DISTANCE TO NEAREST LEASE LINE (Feet) 1822		23. NUMBER OF ACRES IN DRILLING UNIT 321		
		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 295		26. PROPOSED DEPTH MD: 9735 TVD: 9721		
27. ELEVATION - GROUND LEVEL 5120		28. BOND NUMBER 22013542		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496		
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 Danielle Piernot		TITLE Regulatory Analyst		PHONE 720 929-6156		
SIGNATURE		DATE 11/23/2010		EMAIL gnbregulatory@anadarko.com		
API NUMBER ASSIGNED 43047513620000		 Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	9735		
Pipe	Grade	Length	Weight			
	Grade I-80 Buttress	9735	11.6			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2420		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	2420	28.0			

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 921-35G4BS

Surface:	2053 FNL / 1643 FEL	SWNE
BHL:	2250 FNL / 1822 FEL	SWNE

Section 35 T9S R21E

Unitah County, Utah
Mineral Lease: ST UT ML 22582

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	1486	
Birds Nest	1792	Water
Mahogany	2169	Water
Wasatch	4756	Gas
Mesaverde	7482	Gas
MVU2	8375	Gas
MVL1	8939	Gas
TVD	9721	
TD	9735	

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 9,721' TVD, approximately equals 5,955 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,817 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:**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 12-1/4 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. 12 of 20

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'				3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,420	28.00	IJ-55	LTC	0.86	1.66	5.08
PRODUCTION	4-1/2"	0 to 9,664	11.60	I-80	BTC	2.00	1.05	2.82
	4-1/2"	9,664 to 9,735	11.60	HCP-110	BTC	10690	7580	367000
						2.72	1.25	3.72

*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.22

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
 (Burst Assumptions: TD = 12.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoyn.Fact. of water)
MASP 3,817 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
 (Burst Assumptions: TD = 12.0 ppg) 0.61 psi/ft = bottomhole gradient
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoyn.Fact. of water)
MABHP 5,955 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
Option 1	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	LEAD	1,920'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	180	35%	11.00	3.82
Option 2	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	4,255'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	310	10%	11.00	3.38
	TAIL	5,480'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,060	10%	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.

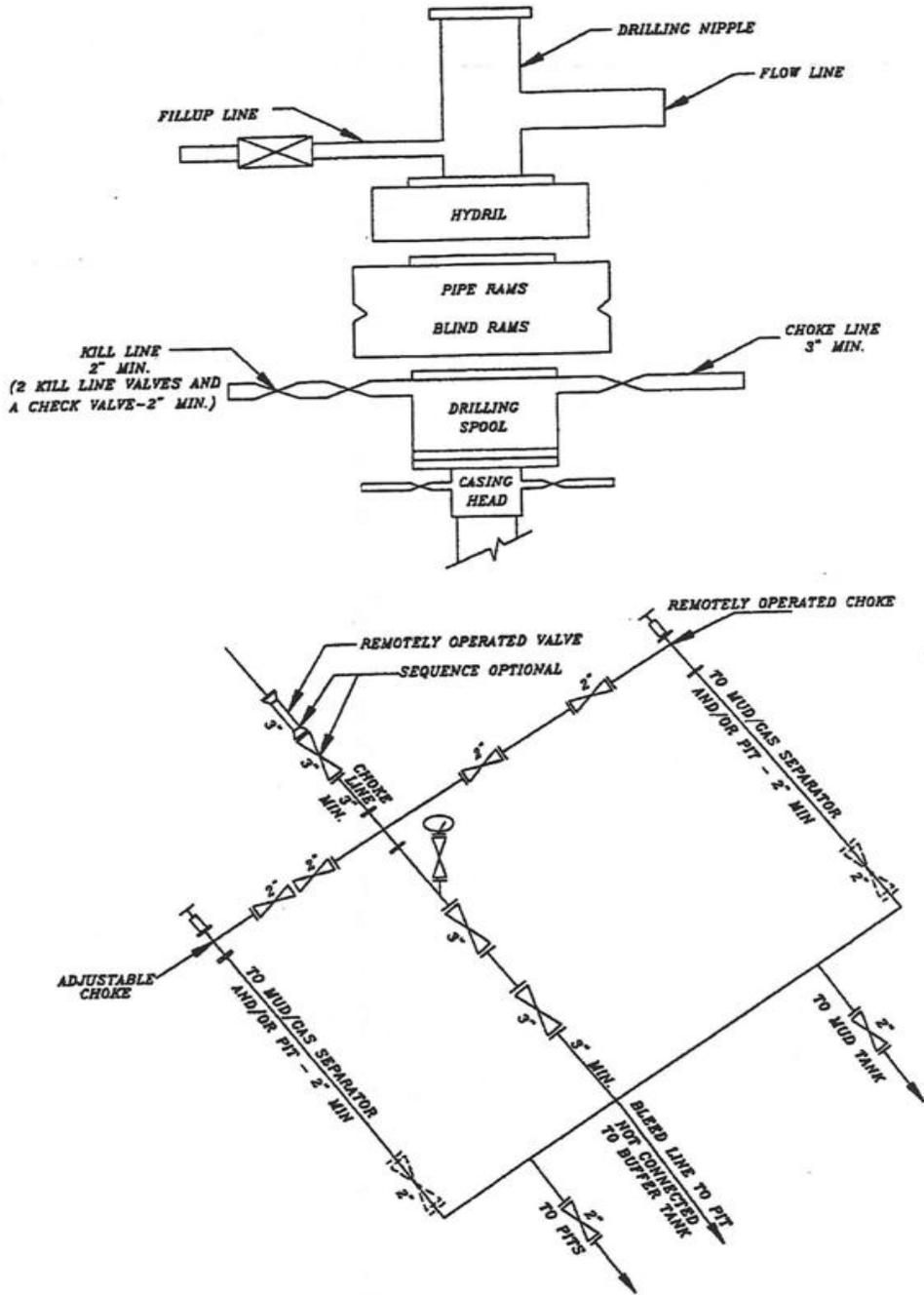
DRILLING ENGINEER: _____
 John Huycke / Emile Goodwin

DATE: _____

DRILLING SUPERINTENDENT: _____
 John Merkel / Lovel Young

DATE: _____

EXHIBIT A NBU 921-35G4BS

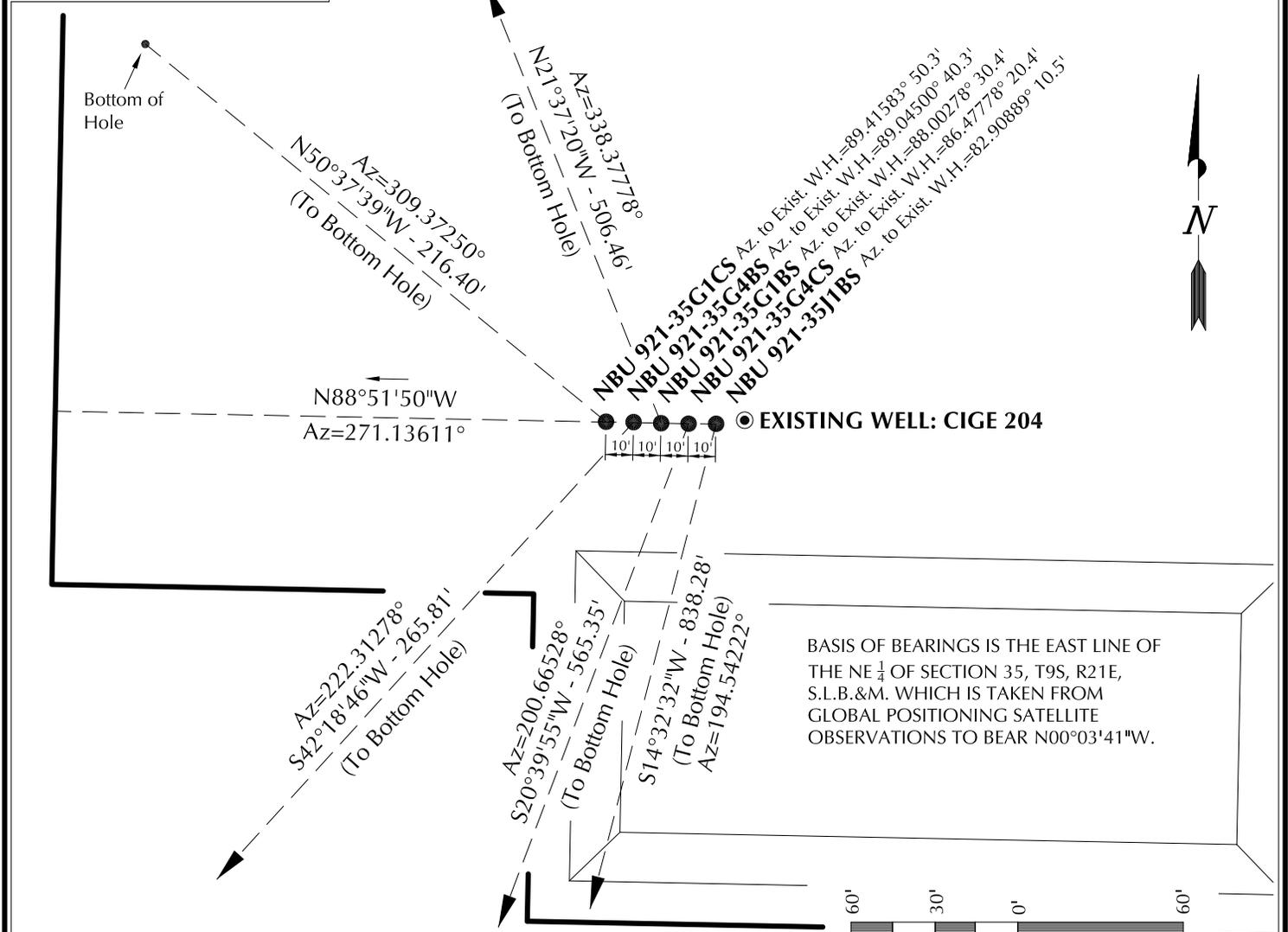


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 921-35G1CS	39°59'38.850"	109°30'55.343"	39°59'38.976"	109°30'52.870"	2053' FNL 1653' FEL	39°59'40.205"	109°30'57.493"	39°59'40.332"	109°30'55.020"	1916' FNL 1820' FEL
NBU 921-35G4BS	39°59'38.849"	109°30'55.215"	39°59'38.975"	109°30'52.742"	2053' FNL 1643' FEL	39°59'36.906"	109°30'57.512"	39°59'37.032"	109°30'55.039"	2250' FNL 1822' FEL
NBU 921-35G1BS	39°59'38.845"	109°30'55.087"	39°59'38.971"	109°30'52.614"	2053' FNL 1633' FEL	39°59'43.495"	109°30'57.487"	39°59'43.622"	109°30'55.014"	1583' FNL 1819' FEL
NBU 921-35G4CS	39°59'38.843"	109°30'54.959"	39°59'38.969"	109°30'52.486"	2053' FNL 1623' FEL	39°59'33.616"	109°30'57.518"	39°59'33.742"	109°30'55.044"	2583' FNL 1823' FEL
NBU 921-35J1BS	39°59'38.843"	109°30'54.830"	39°59'38.969"	109°30'52.357"	2053' FNL 1613' FEL	39°59'30.825"	109°30'57.528"	39°59'30.951"	109°30'55.055"	2419' FSL 1824' FEL
CIGE 204	39°59'38.855"	109°30'54.697"	39°59'38.982"	109°30'52.224"	2052' FNL 1603' FEL	39°59'38.855"	109°30'54.697"	39°59'38.982"	109°30'52.224"	

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 921-35G1CS	137.3'	-167.3'	NBU 921-35G4BS	-196.6'	-178.9'	NBU 921-35G1BS	470.8'	-186.6'	NBU 921-35G4CS	-529.0'	-199.5'
NBU 921-35J1BS	-811.4'	-210.5'									



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

WELL PAD - NBU 921-35G

WELL PAD INTERFERENCE PLAT
WELLS - NBU 921-35G1CS,
NBU 921-35G4BS, NBU 921-35G1BS,
NBU 921-35G4CS & NBU 921-35J1BS
LOCATED IN SECTION 35, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.



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

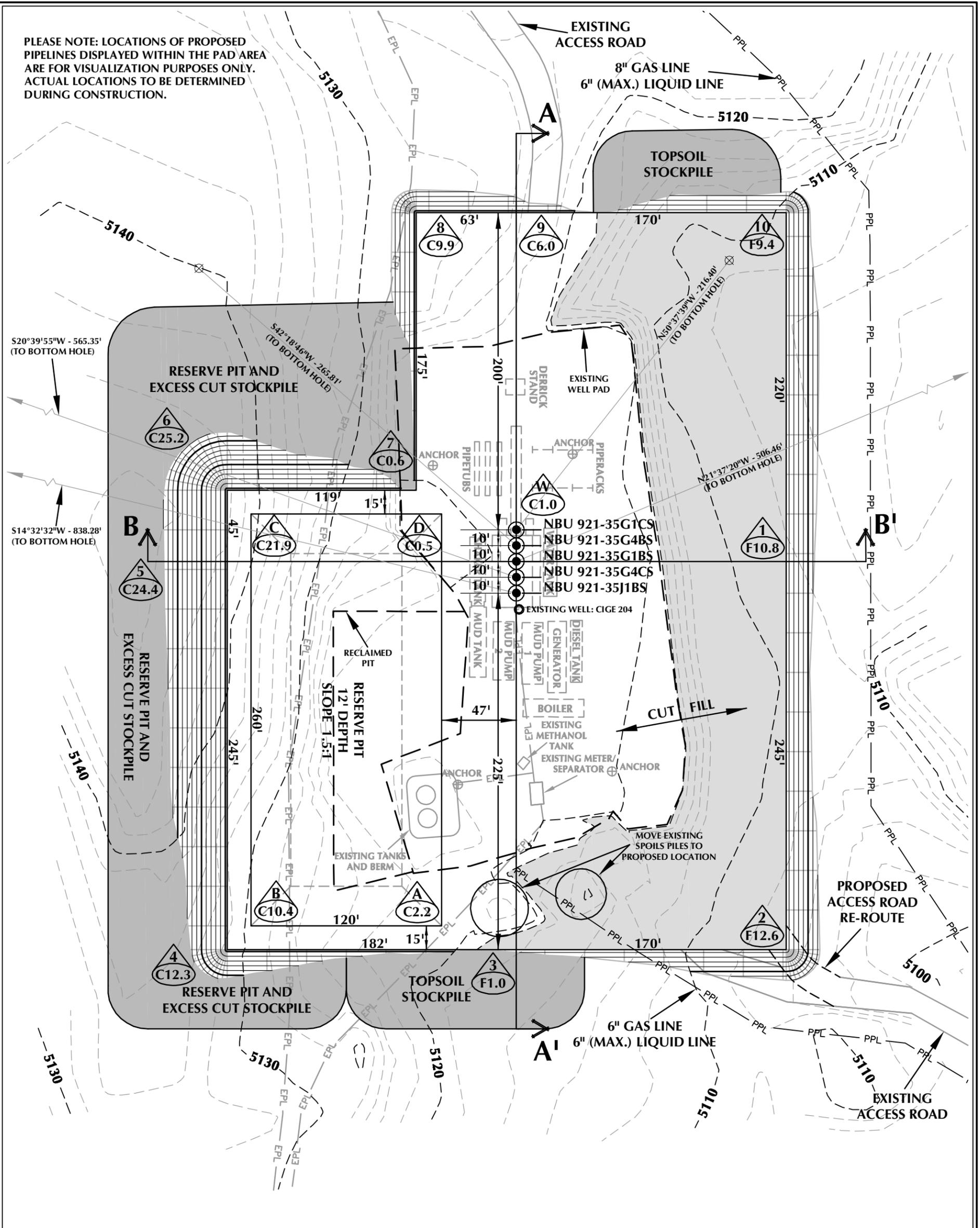
TIMBERLINE

(435) 789-1365

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

DATE SURVEYED: 09-29-10	SURVEYED BY: M.S.B.	SHEET NO: 6 6 OF 17
DATE DRAWN: 10-05-10	DRAWN BY: M.W.W.	
SCALE: 1" = 60'		
Date Last Revised:		

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 921-35G DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5120.2'
 FINISHED GRADE ELEVATION = 5119.2'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.96 ACRES
 TOTAL DAMAGE AREA = 6.38 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD - NBU 921-35G
WELL PAD - LOCATION LAYOUT
 NBU 921-35G1CS,
 NBU 921-35G4BS, NBU 921-35G1BS,
 NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 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 = 18,871 C.Y.
 TOTAL FILL FOR WELL PAD = 18,234 C.Y.
 TOPSOIL @ 6" DEPTH = 2,311 C.Y.
 EXCESS MATERIAL = 637 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT
 +/- 11,020 CY
 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)
- PPL - PROPOSED PIPELINE
- EPL - EXISTING PIPELINE

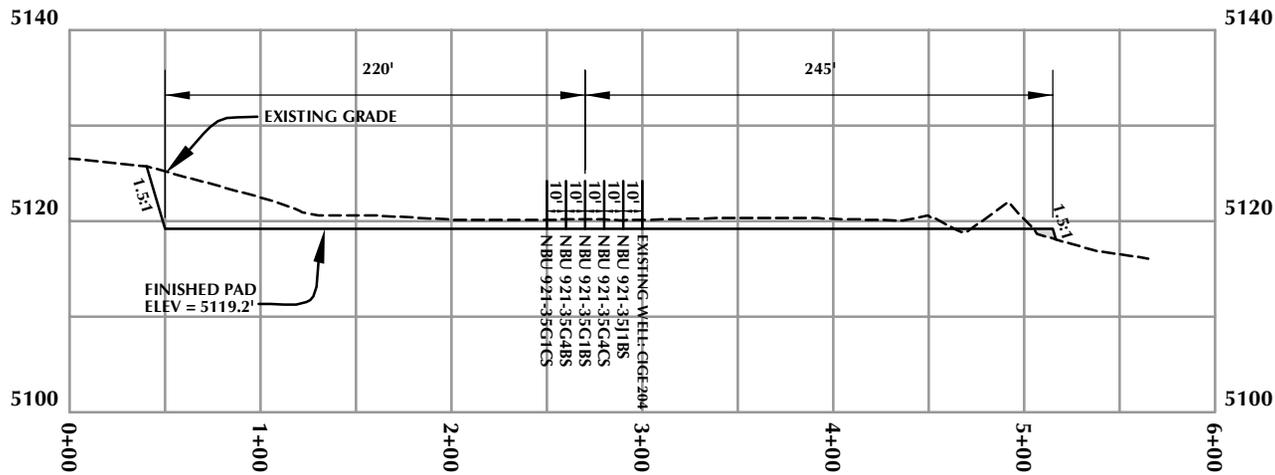


HORIZONTAL 0 30 60 1" = 60'
 2' CONTOURS

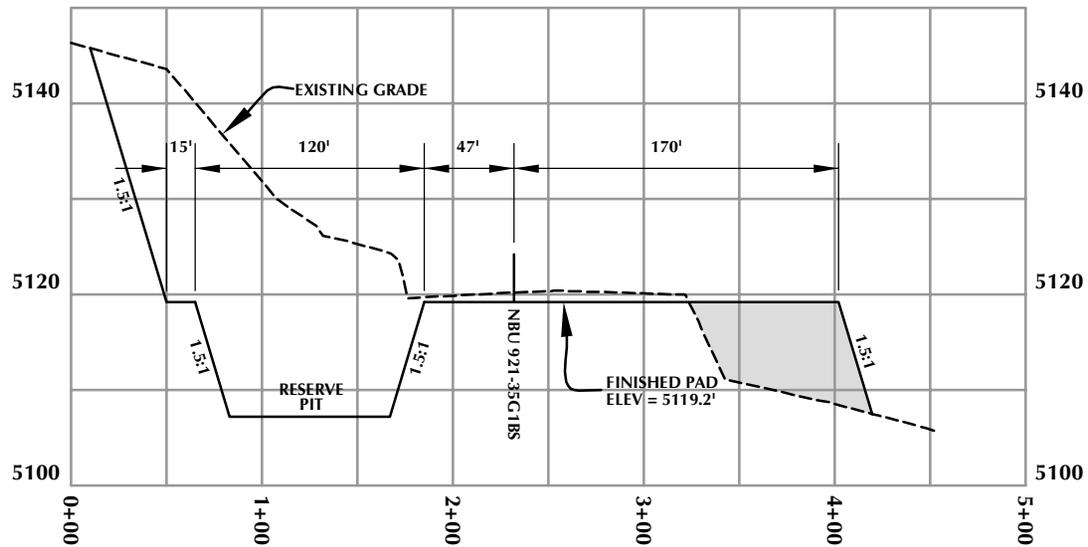
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 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

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CROSS SECTION A-A'



CROSS SECTION B-B'

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

WELL PAD - NBU 921-35G

WELL PAD - CROSS SECTIONS

NBU 921-35G1CS,

NBU 921-35G4BS, NBU 921-35G1BS,

NBU 921-35G4CS & NBU 921-35J1BS

LOCATED IN SECTION 35, T9S, R21E,

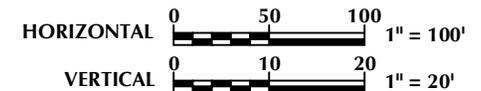
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Scale: 1"=100'

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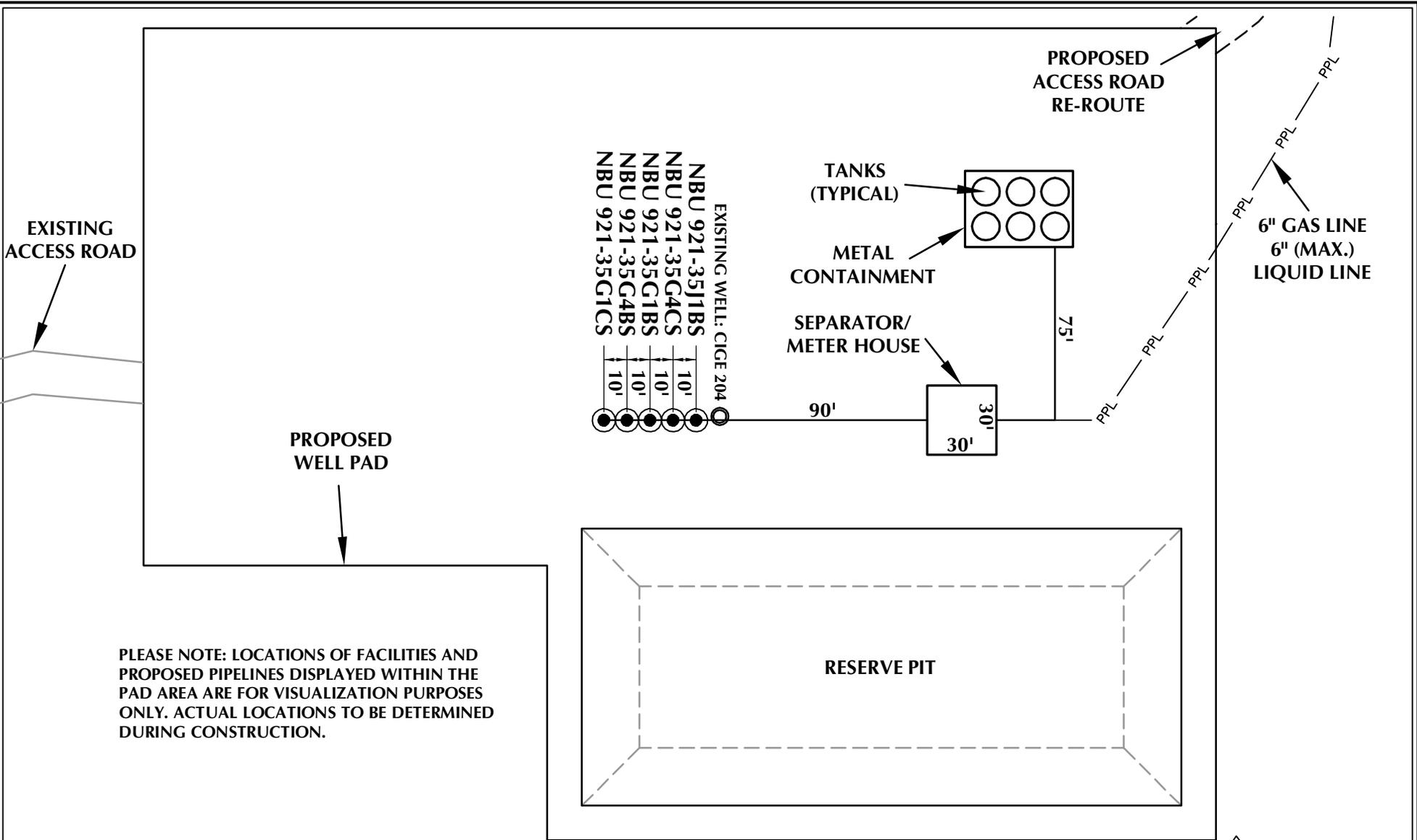
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8 OF 17

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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 921-35G

WELL PAD - FACILITIES DIAGRAM
 NBU 921-35G1CS,
 NBU 921-35G4BS, NBU 921-35G1BS,
 NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., Uintah County, Utah



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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: 10/19/10

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 12/9/10

9

9 OF 17

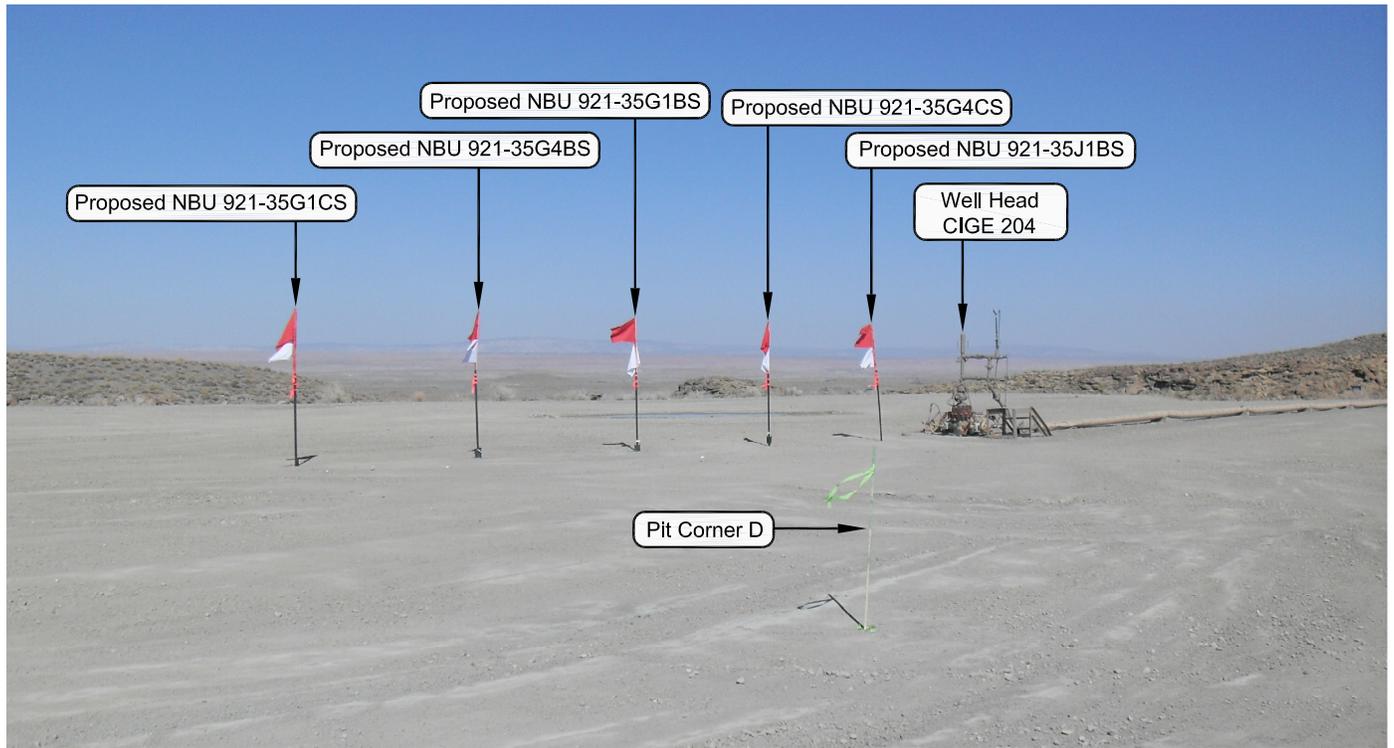


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: EASTERLY

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WELL PAD - NBU 921-35G

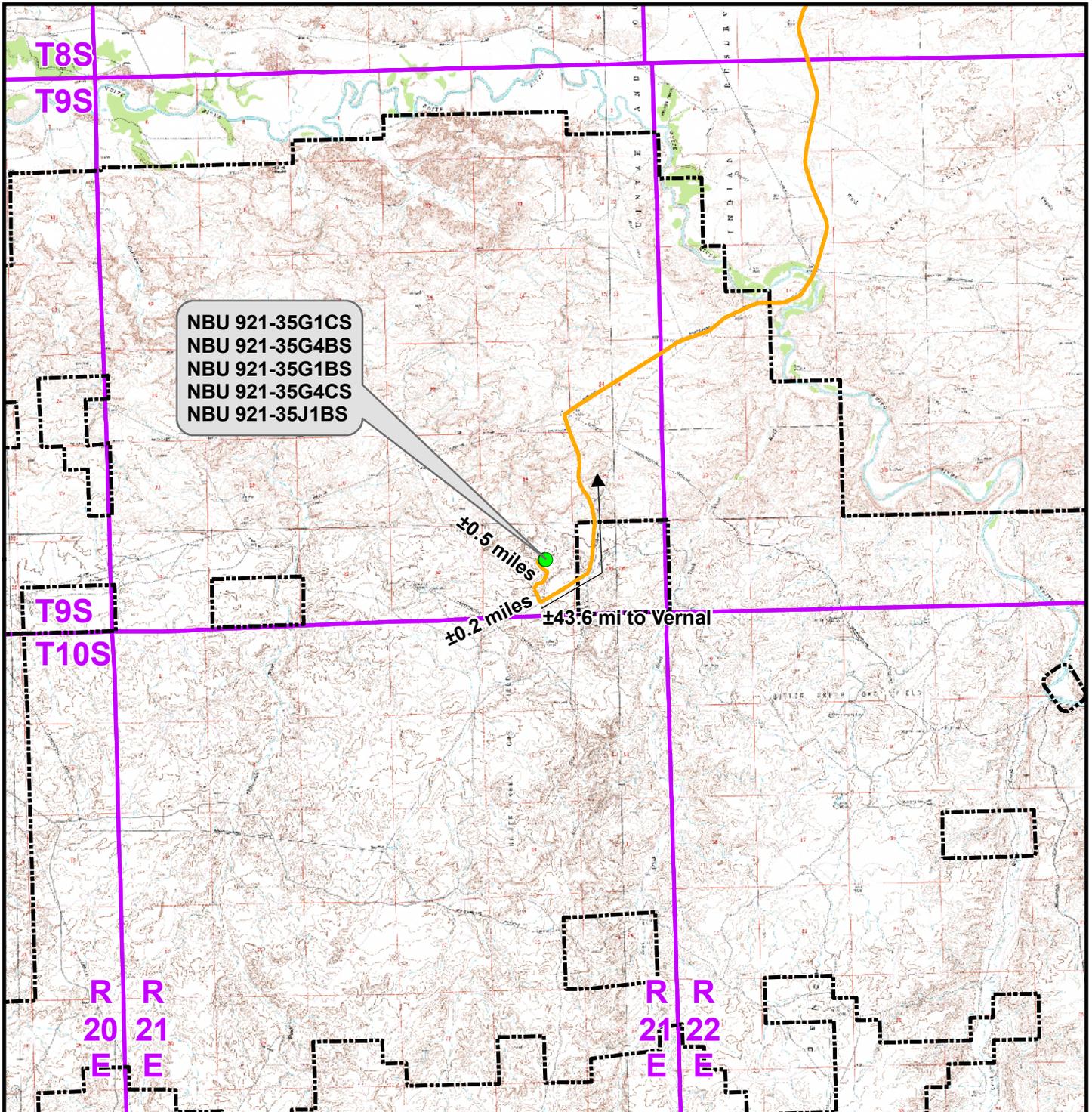
LOCATION PHOTOS
 NBU 921-35G1CS,
 NBU 921-35G4BS, NBU 921-35G1BS,
 NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., Uintah County, Utah.



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

DATE PHOTOS TAKEN: 09-29-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 10
DATE DRAWN: 10-05-10	DRAWN BY: M.W.W.	
Date Last Revised:		10 OF 17



Legend

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

Distance From Well Pad - NBU 921-35G To Unit Boundary: ±1,613ft

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

WELL PAD - NBU 921-35G

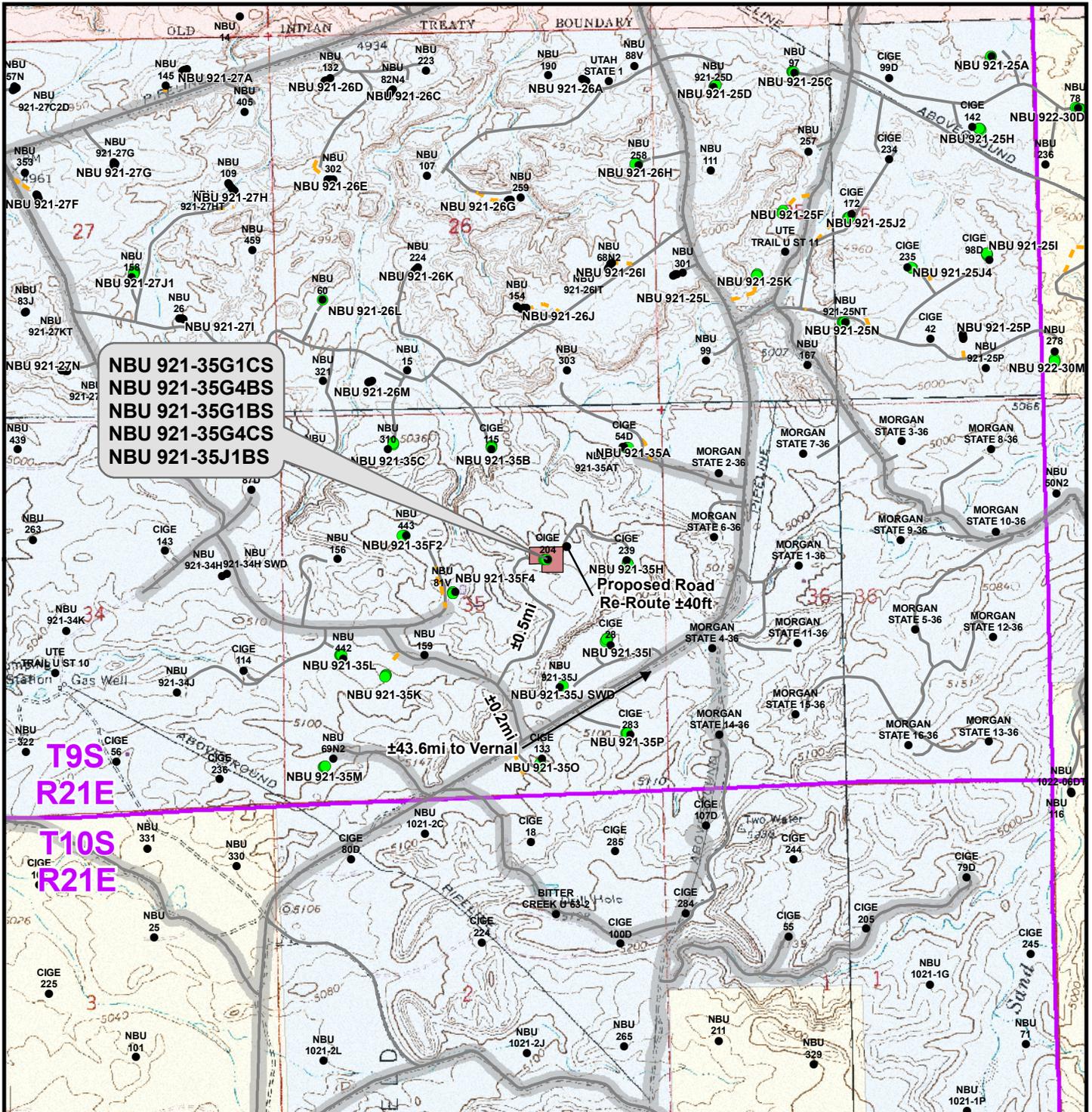
TOPO A
 NBU 921-35G1CS,
 NBU 921-35G4BS, NBU 921-35G1BS,
 NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH



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



Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 19 Oct 2010	11
Revised:	Date:	



Legend

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

Total Proposed Road Re-Route Length: ±40ft

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

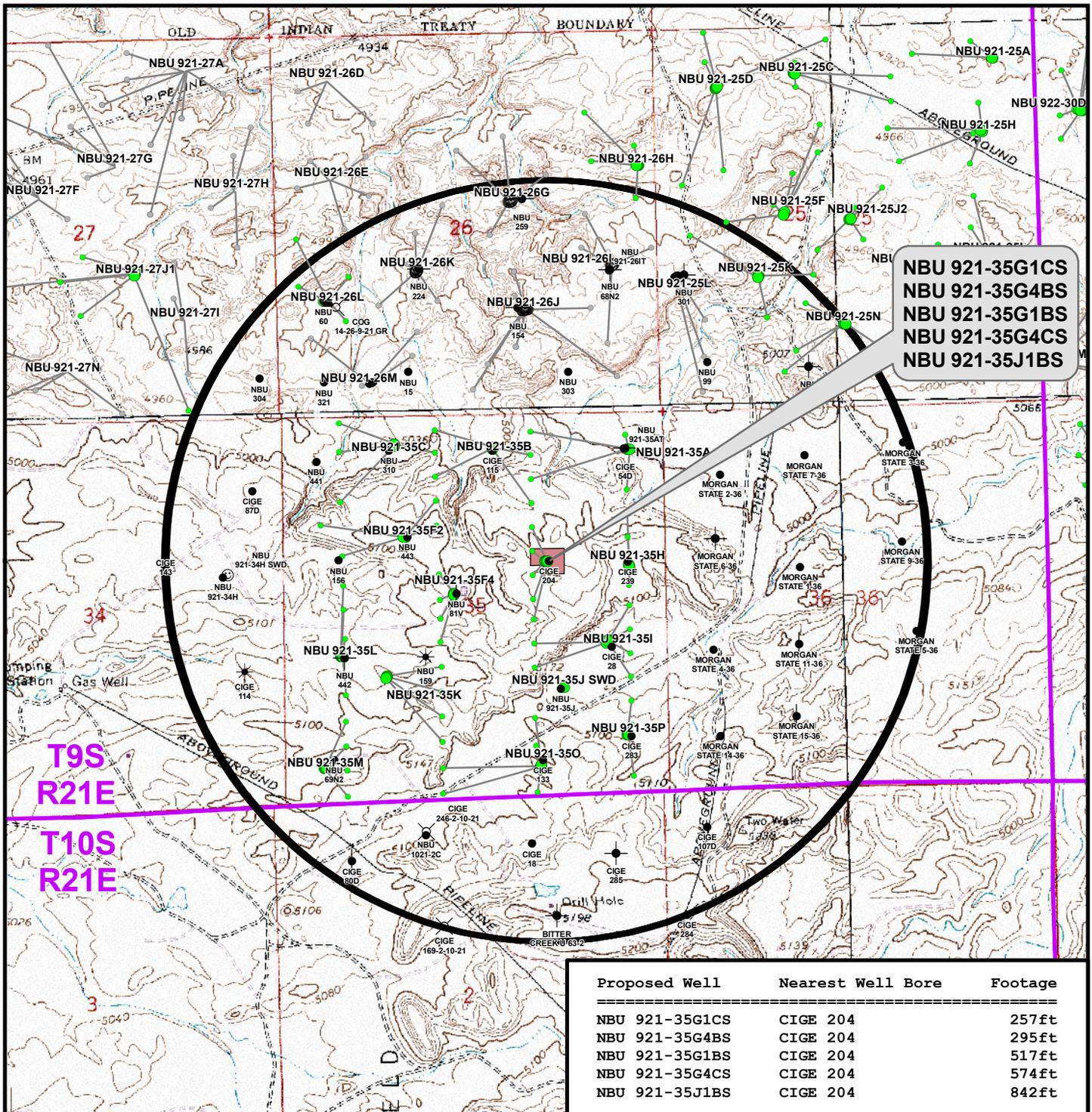
WELL PAD - NBU 921-35G

TOPO B
NBU 921-35G1CS,
NBU 921-35G4BS, NBU 921-35G1BS,
NBU 921-35G4CS & NBU 921-35J1BS
LOCATED IN SECTION 35, T9S, R21E,
S.L.B.&M., UTAH 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: 12
Drawn: KGS	Date: 19 Oct 2010	12 of 17
Revised: TL	Date: 9 Dec 2010	



Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Pad
- Well Path
- Bottom Hole - Existing
- Well - 1 Mile Radius
- Producing
- ★ Active
- ⊙ Spudded (Drilling commenced: Not yet completed)
- ▲ Approved permit (APD); not yet spudded
- New Permit (Not yet approved or drilled)
- ⊕ Inactive
- ⊗ Drilling Operations Suspended
- Temporarily-Abandoned
- Shut-In
- Plugged and Abandoned
- ⊗ Location Abandoned
- ⊗ Dry hole marker, buried
- ⊗ Returned APD (Unapproved)

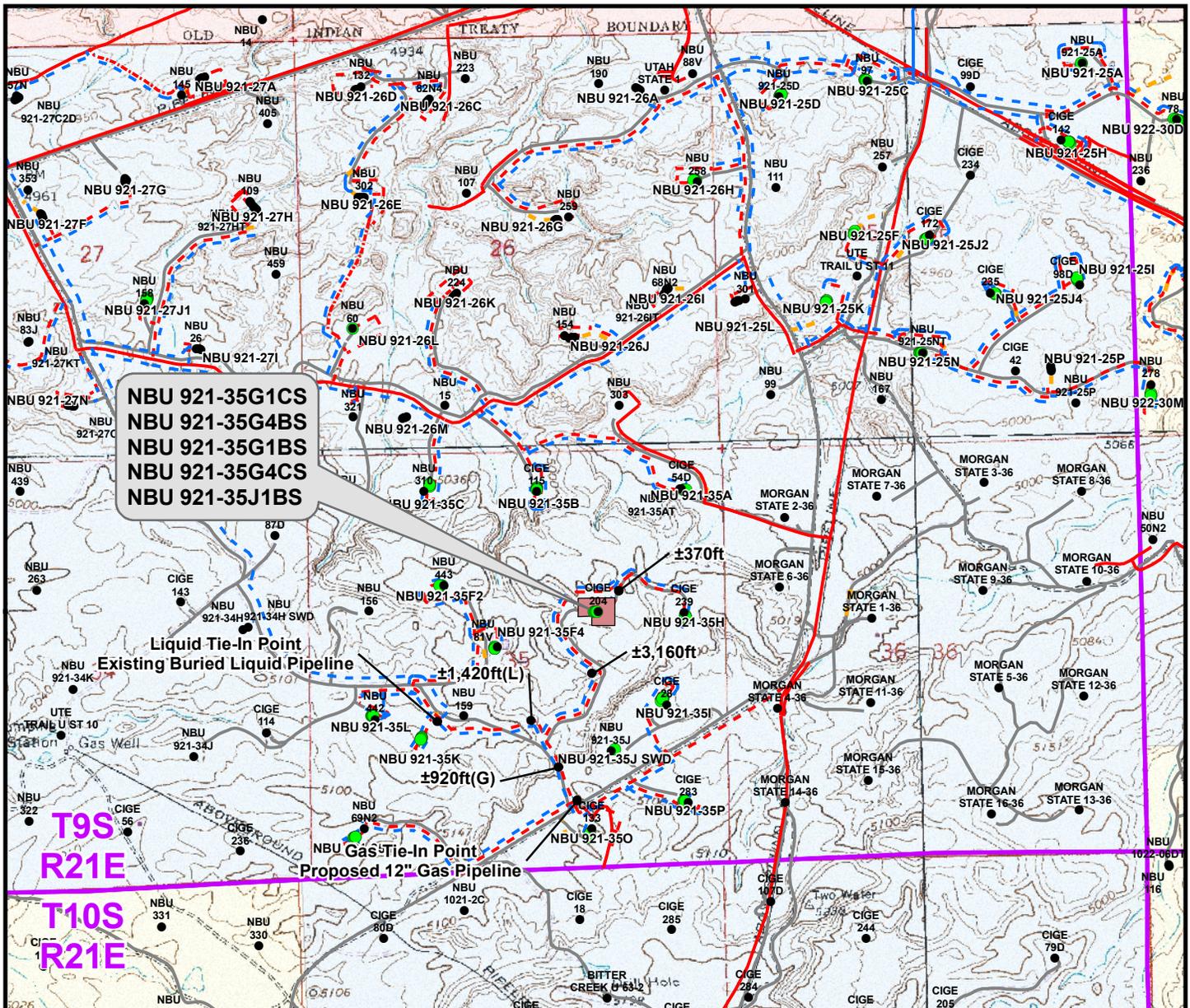
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 921-35G

TOPO C
NBU 921-35G1CS,
NBU 921-35G4BS, NBU 921-35G1BS,
NBU 921-35G4CS & NBU 921-35J1BS
LOCATED IN SECTION 35, T9S, R21E,
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: CPS	Date: 19 Oct 2010	13
Revised: TL	Date: 9 Dec 2010	



**NBU 921-35G1CS
 NBU 921-35G4BS
 NBU 921-35G1BS
 NBU 921-35G4CS
 NBU 921-35J1BS**

Liquid Tie-In Point
 Existing Buried Liquid Pipeline

Gas Tie-In Point
 Proposed 12" Gas Pipeline

**T9S
 R21E
 T10S
 R21E**

Proposed Liquid Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±150ft
Proposed 6" (Max.) (Edge of Pad to 35H Intersection)	±370ft
Proposed 6" (Max.) (35H Intersection to 35M Intersection)	±3,160ft
Proposed 6" (Max.) (35M Intersection to Existing Buried Pipeline)	±1,420ft
TOTAL PROPOSED LIQUID PIPELINE =	±5,100ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±150ft
Proposed 6" (Edge of Pad to 35H Intersection)	±370ft
Proposed 8" (35H Intersection to 35K Intersection)	±3,160ft
Proposed 12" (35K Intersection to 35M Intersection)	±920ft
TOTAL PROPOSED GAS PIPELINE =	±4,600ft

Legend

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

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

WELL PAD - NBU 921-35G

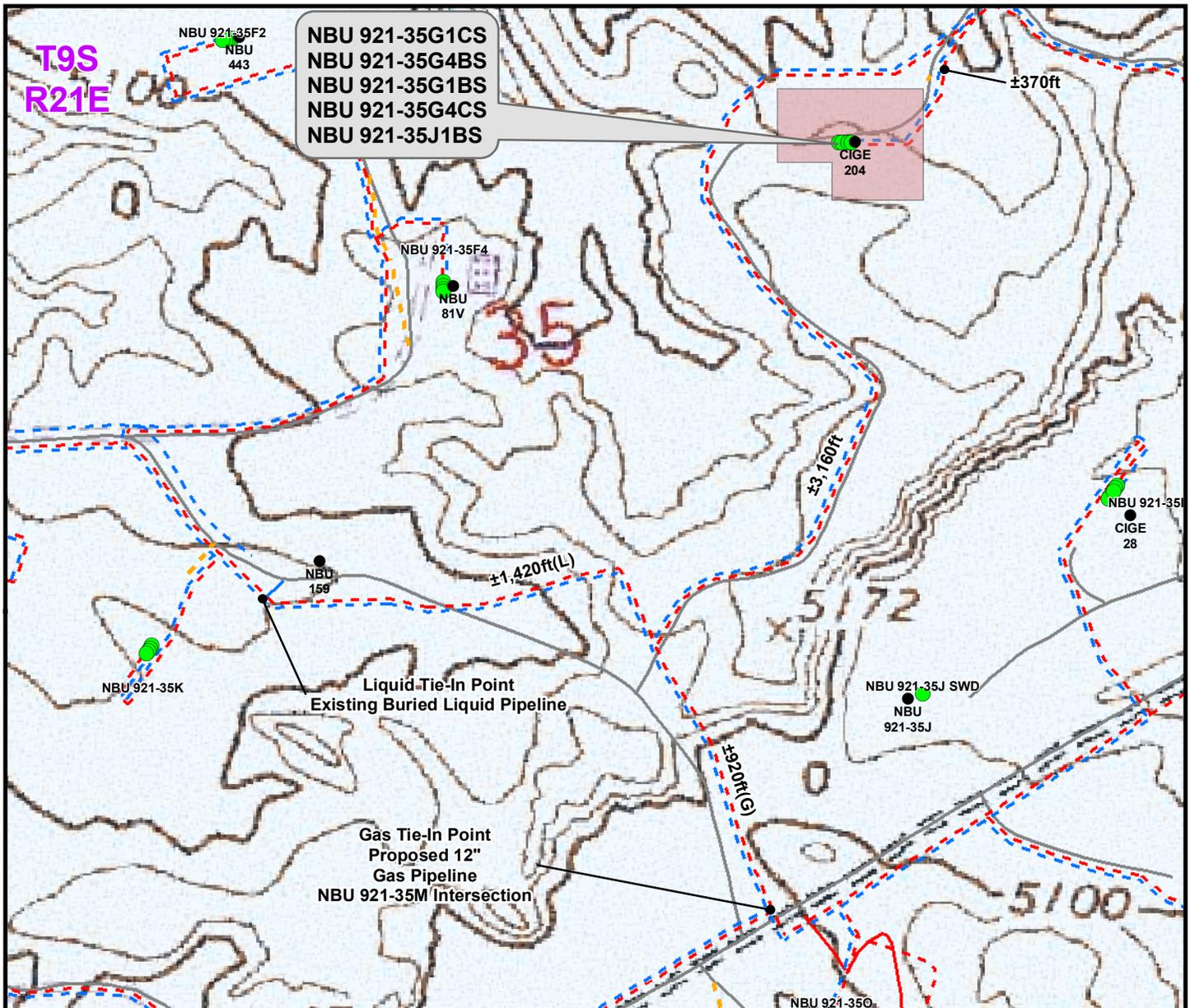
TOPO D
NBU 921-35G1CS,
NBU 921-35G4BS, NBU 921-35G1BS,
NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH

609

CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone (307) 674-0609
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Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 19 Oct 2010	14
Revised: TL	Date: 9 Dec 2010	



Proposed Liquid Pipeline	Length
Proposed 6" (Max.) (Meter House to Edge of Pad)	±150ft
Proposed 6" (Max.) (Edge of Pad to 35H Intersection)	±370ft
Proposed 6" (Max.) (35H Intersection to 35M Intersection)	±3,160ft
Proposed 6" (Max.) (35M Intersection to Existing Buried Pipeline)	±1,420ft
TOTAL PROPOSED LIQUID PIPELINE =	±5,100ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±150ft
Proposed 6" (Edge of Pad to 35H Intersection)	±370ft
Proposed 8" (35H Intersection to 35K Intersection)	±3,160ft
Proposed 12" (35K Intersection to 35M Intersection)	±920ft
TOTAL PROPOSED GAS PIPELINE =	±4,600ft

Legend

- Well - Proposed
- Well - Existing
- Well Pad
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - To Be Upgraded
- 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

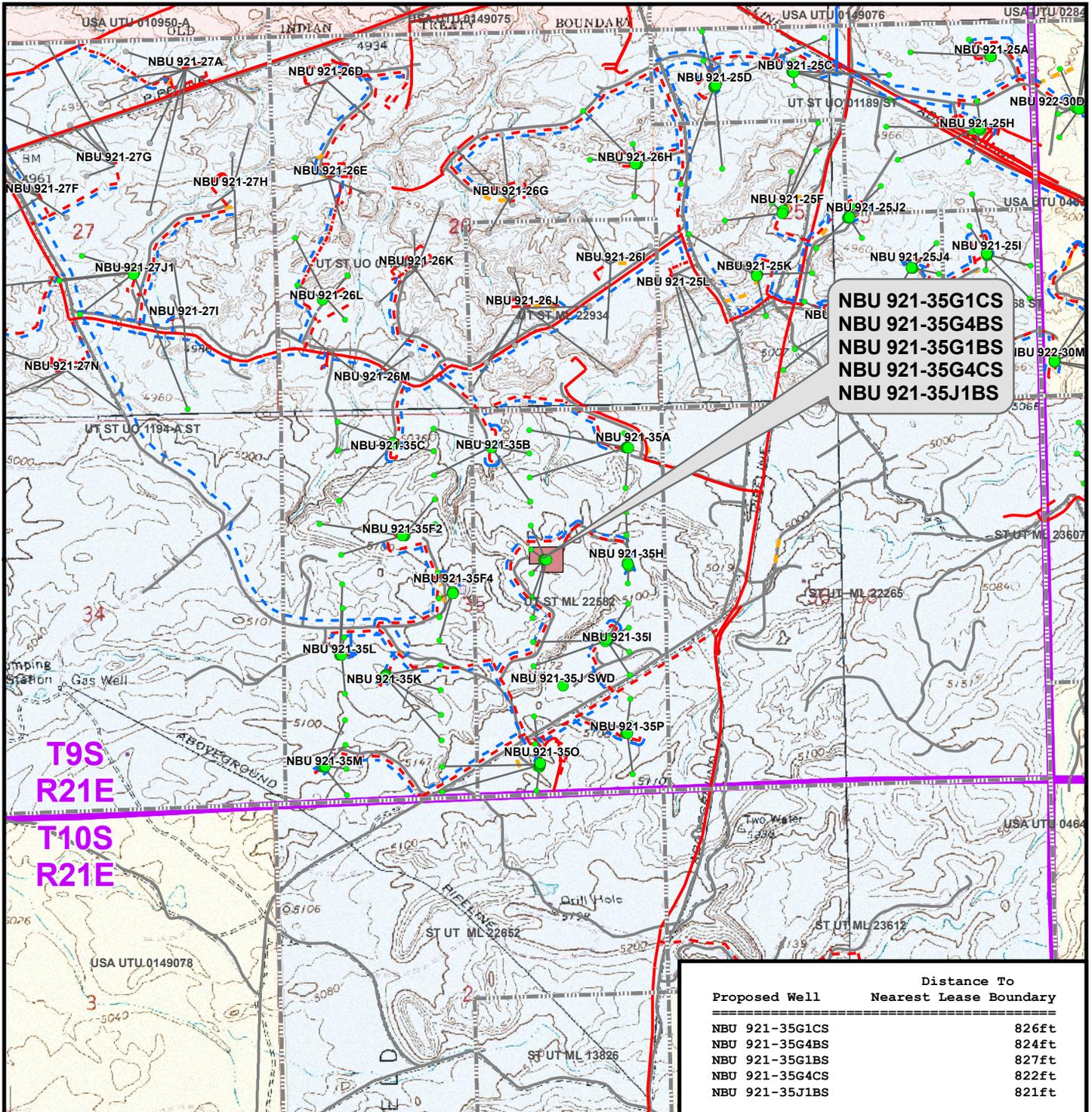
WELL PAD - NBU 921-35G

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 921-35G1CS,
 NBU 921-35G4BS, NBU 921-35G1BS,
 NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 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: CPS	Date: 19 Oct 2010	15
Revised: TL	Date: 9 Dec 2010	

15 of 17



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 - To Be Upgraded
- 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 921-35G

TOPO E
 NBU 921-35G1CS,
 NBU 921-35G4BS, NBU 921-35G1BS,
 NBU 921-35G4CS & NBU 921-35J1BS
 LOCATED IN SECTION 35, T9S, R21E,
 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: CPS	Date: 19 Oct 2010	16
Revised: TL	Date: 9 Dec 2010	

**Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 921-35G
WELLS – NBU 921-35G1CS, NBU 921-35G4BS,
NBU 921-35G1BS, NBU 921-35G4CS & NBU 921-35J1BS
Section 35, T9S, R21E, 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 20.1 miles to a Class D County Road to the northwest. Exit right and proceed in a northwesterly direction along the Class D County Road approximately 0.2 miles to a service road to the northeast. Exit right and proceed in a northeasterly direction along the service road approximately 0.5 miles to the proposed well pad.

Total distance from Vernal, Utah to the proposed well location is approximately 44.3 miles in a southerly direction.

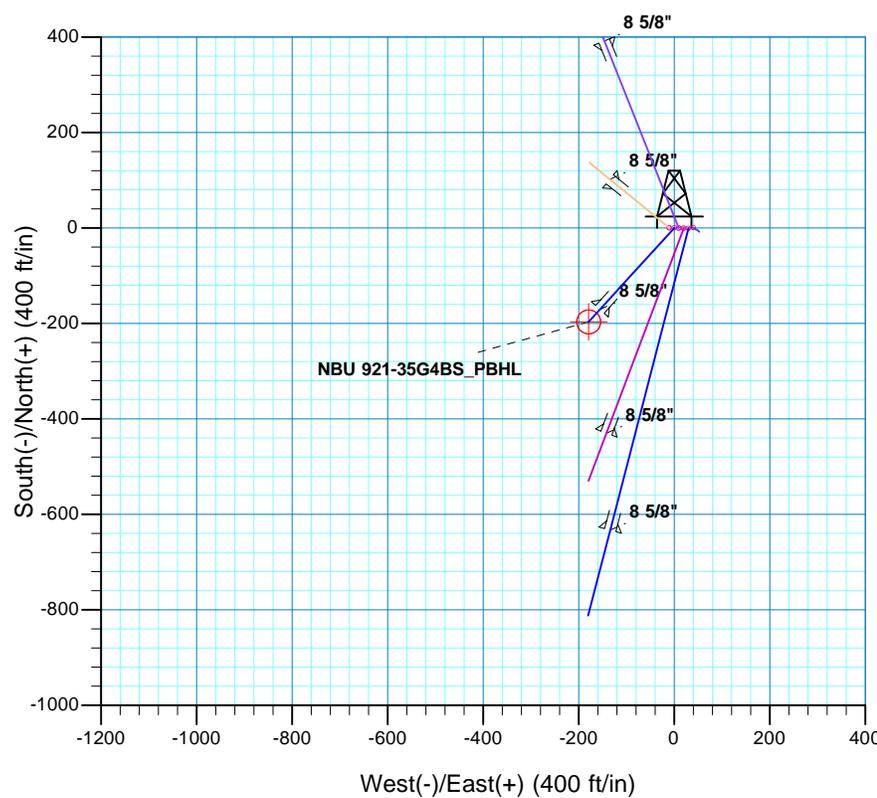
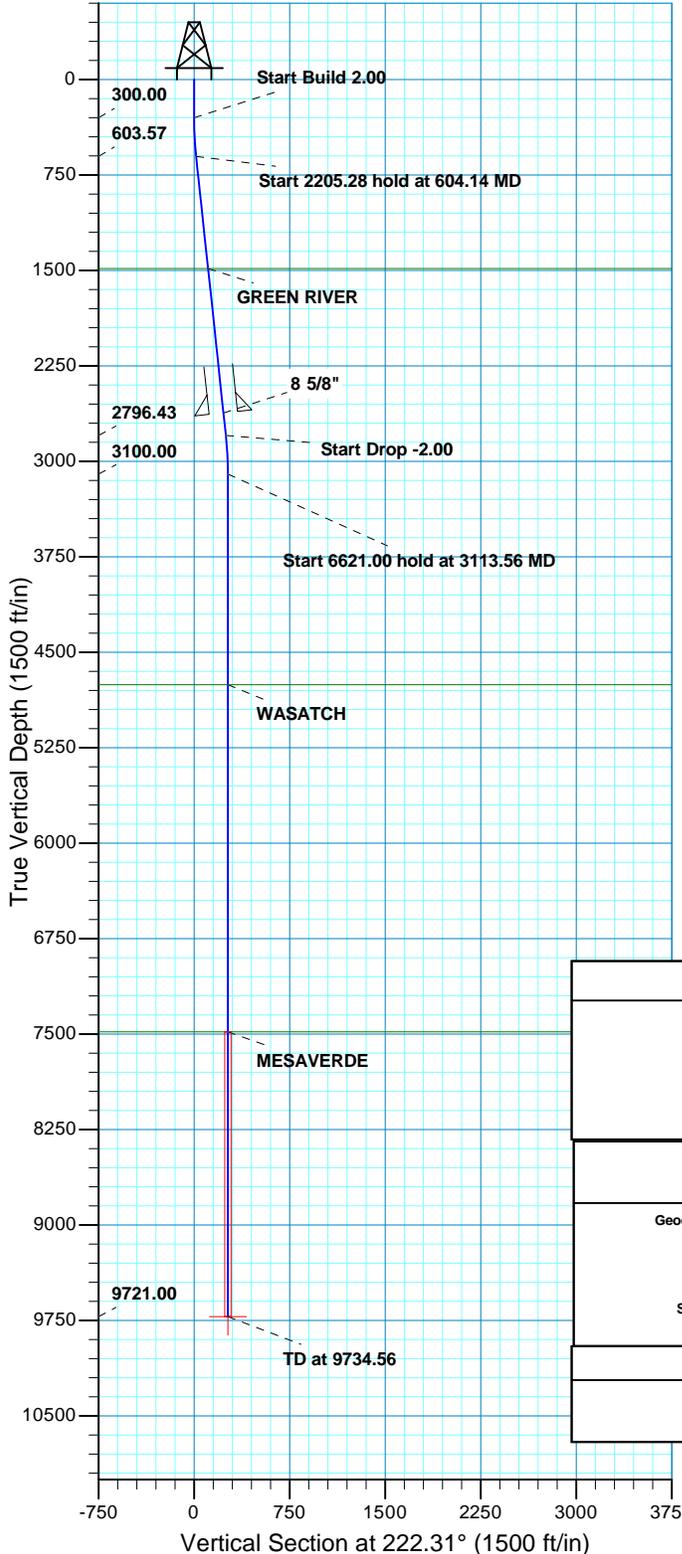
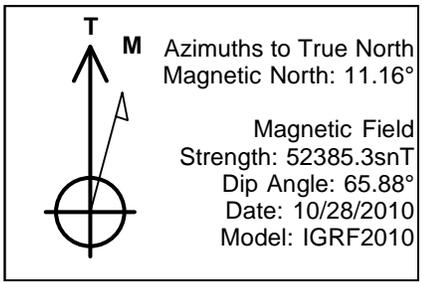
'APIWellNo:43047513620000'



Project: Uintah County, UT UTM12
 Site: NBU 921-35G Pad
 Well: NBU 921-35G4BS
 Wellbore: OH
 Design: PLAN #1



WELL DETAILS: NBU 921-35G4BS									
GL 5119' & KB 14' @ 5133.00ft (ASSUMED)									
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
	0.00	0.00	14527384.14	2056444.91	39° 59' 38.976 N	109° 30' 52.740 W			
DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
PBHL	9721.00	-196.67	-179.01	14527184.51	2056269.20	39° 59' 37.032 N	109° 30' 55.040 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	
604.14	6.08	222.31	603.57	-11.93	-10.86	2.00	222.31	16.13	
2809.42	6.08	222.31	2796.43	-184.74	-168.15	0.00	0.00	249.81	
3113.56	0.00	0.00	3100.00	-196.67	-179.01	2.00	180.00	265.94	
9734.56	0.00	0.00	9721.00	-196.67	-179.01	0.00	0.00	265.94	NBU 921-35G4BS_PBHL

PROJECT DETAILS: Uintah County, UT UTM12		
Geodetic System:	Universal Transverse Mercator (US Survey Feet)	
Datum:	NAD 1927 - Western US	
Ellipsoid:	Clarke 1866	
Zone:	Zone 12N (114 W to 108 W)	
Location:	SEC 35 T9S R21E	
System Datum:	Mean Sea Level	

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1486.00	1491.57	GREEN RIVER
4756.00	4769.56	WASATCH
7482.00	7495.56	MESAVERDE

CASING DETAILS			
TVD	MD	Name	Size
2619.00	2630.98	8 5/8"	8.625



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-35G Pad

NBU 921-35G4BS

OH

Plan: PLAN #1

Standard Planning Report

28 October, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 921-35G Pad, SEC 35 T9S R21E				
Site Position:	Northing:	14,527,383.91 usft	Latitude:	39° 59' 38.969 N	
From: Lat/Long	Easting:	2,056,474.61 usft	Longitude:	109° 30' 52.358 W	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35G4BS, 2053' FNL 1643' FEL					
Well Position	+N/-S	0.73 ft	Northing:	14,527,384.14 usft	Latitude:	39° 59' 38.976 N
	+E/-W	-29.69 ft	Easting:	2,056,444.90 usft	Longitude:	109° 30' 52.740 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,119.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/28/2010	11.16	65.88	52,385

Design	PLAN #1			
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	222.31

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	
604.14	6.08	222.31	603.57	-11.93	-10.86	2.00	2.00	0.00	222.31	
2,809.42	6.08	222.31	2,796.43	-184.74	-168.15	0.00	0.00	0.00	0.00	
3,113.56	0.00	0.00	3,100.00	-196.67	-179.01	2.00	-2.00	0.00	180.00	
9,734.56	0.00	0.00	9,721.00	-196.67	-179.01	0.00	0.00	0.00	0.00	NBU 921-35G4BS_PI

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00										
400.00	2.00	222.31	399.98	-1.29	-1.17	1.75	2.00	2.00	2.00	0.00
500.00	4.00	222.31	499.84	-5.16	-4.70	6.98	2.00	2.00	2.00	0.00
600.00	6.00	222.31	599.45	-11.61	-10.56	15.69	2.00	2.00	2.00	0.00
604.14	6.08	222.31	603.57	-11.93	-10.86	16.13	2.00	2.00	2.00	0.00
Start 2205.28 hold at 604.14 MD										
700.00	6.08	222.31	698.89	-19.44	-17.69	26.29	0.00	0.00	0.00	0.00
800.00	6.08	222.31	798.33	-27.28	-24.83	36.88	0.00	0.00	0.00	0.00
900.00	6.08	222.31	897.76	-35.11	-31.96	47.48	0.00	0.00	0.00	0.00
1,000.00	6.08	222.31	997.20	-42.95	-39.09	58.08	0.00	0.00	0.00	0.00
1,100.00	6.08	222.31	1,096.64	-50.79	-46.23	68.67	0.00	0.00	0.00	0.00
1,200.00	6.08	222.31	1,196.07	-58.62	-53.36	79.27	0.00	0.00	0.00	0.00
1,300.00	6.08	222.31	1,295.51	-66.46	-60.49	89.87	0.00	0.00	0.00	0.00
1,400.00	6.08	222.31	1,394.95	-74.29	-67.62	100.46	0.00	0.00	0.00	0.00
1,491.57	6.08	222.31	1,486.00	-81.47	-74.15	110.17	0.00	0.00	0.00	0.00
GREEN RIVER										
1,500.00	6.08	222.31	1,494.39	-82.13	-74.76	111.06	0.00	0.00	0.00	0.00
1,600.00	6.08	222.31	1,593.82	-89.97	-81.89	121.66	0.00	0.00	0.00	0.00
1,700.00	6.08	222.31	1,693.26	-97.80	-89.02	132.25	0.00	0.00	0.00	0.00
1,800.00	6.08	222.31	1,792.70	-105.64	-96.15	142.85	0.00	0.00	0.00	0.00
1,900.00	6.08	222.31	1,892.13	-113.48	-103.29	153.44	0.00	0.00	0.00	0.00
2,000.00	6.08	222.31	1,991.57	-121.31	-110.42	164.04	0.00	0.00	0.00	0.00
2,100.00	6.08	222.31	2,091.01	-129.15	-117.55	174.64	0.00	0.00	0.00	0.00
2,200.00	6.08	222.31	2,190.44	-136.99	-124.68	185.23	0.00	0.00	0.00	0.00
2,300.00	6.08	222.31	2,289.88	-144.82	-131.82	195.83	0.00	0.00	0.00	0.00
2,400.00	6.08	222.31	2,389.32	-152.66	-138.95	206.43	0.00	0.00	0.00	0.00
2,500.00	6.08	222.31	2,488.76	-160.50	-146.08	217.02	0.00	0.00	0.00	0.00
2,600.00	6.08	222.31	2,588.19	-168.33	-153.22	227.62	0.00	0.00	0.00	0.00
2,630.98	6.08	222.31	2,619.00	-170.76	-155.43	230.90	0.00	0.00	0.00	0.00
8 5/8"										
2,700.00	6.08	222.31	2,687.63	-176.17	-160.35	238.22	0.00	0.00	0.00	0.00
2,800.00	6.08	222.31	2,787.07	-184.00	-167.48	248.81	0.00	0.00	0.00	0.00
2,809.42	6.08	222.31	2,796.43	-184.74	-168.15	249.81	0.00	0.00	0.00	0.00
Start Drop -2.00										
2,900.00	4.27	222.31	2,886.64	-190.79	-173.65	257.98	2.00	-2.00	2.00	0.00
3,000.00	2.27	222.31	2,986.47	-195.01	-177.50	263.69	2.00	-2.00	2.00	0.00
3,100.00	0.27	222.31	3,086.44	-196.65	-178.99	265.91	2.00	-2.00	2.00	0.00
3,113.56	0.00	0.00	3,100.00	-196.67	-179.01	265.94	2.00	-2.00	2.00	0.00
Start 6621.00 hold at 3113.56 MD										
3,200.00	0.00	0.00	3,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,786.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,886.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	3,986.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,086.44	-196.67	-179.01	265.94	0.00	0.00	0.00	0.00

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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)	
4,200.00	0.00	0.00	4,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,400.00	0.00	0.00	4,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,769.56	0.00	0.00	4,756.00	-196.67	-179.01	265.94	0.00	0.00	0.00	
WASATCH										
4,800.00	0.00	0.00	4,786.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,886.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,986.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,086.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,786.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,886.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,986.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,086.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,786.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,886.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,986.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,086.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,495.56	0.00	0.00	7,482.00	-196.67	-179.01	265.94	0.00	0.00	0.00	
MESAVERDE										
7,500.00	0.00	0.00	7,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,786.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,886.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,986.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,086.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,786.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,886.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,986.44	-196.67	-179.01	265.94	0.00	0.00	0.00	
9,100.00	0.00	0.00	9,086.44	-196.67	-179.01	265.94	0.00	0.00	0.00	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

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)
9,200.00	0.00	0.00	9,186.44	-196.67	-179.01	265.94	0.00	0.00	0.00
9,300.00	0.00	0.00	9,286.44	-196.67	-179.01	265.94	0.00	0.00	0.00
9,400.00	0.00	0.00	9,386.44	-196.67	-179.01	265.94	0.00	0.00	0.00
9,500.00	0.00	0.00	9,486.44	-196.67	-179.01	265.94	0.00	0.00	0.00
9,600.00	0.00	0.00	9,586.44	-196.67	-179.01	265.94	0.00	0.00	0.00
9,700.00	0.00	0.00	9,686.44	-196.67	-179.01	265.94	0.00	0.00	0.00
9,734.56	0.00	0.00	9,721.00	-196.67	-179.01	265.94	0.00	0.00	0.00
NBU 921-35G4BS_PBHL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
NBU 921-35G4BS_PBH - hit/miss target - Shape - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,721.00	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,630.98	2,619.00	8 5/8"	8.625	11.000	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,491.57	1,486.00	GREEN RIVER			
4,769.56	4,756.00	WASATCH			
7,495.56	7,482.00	MESAVERDE			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 2.00	
604.14	603.57	-11.93	-10.86	Start 2205.28 hold at 604.14 MD	
2,809.42	2,796.43	-184.74	-168.15	Start Drop -2.00	
3,113.56	3,100.00	-196.67	-179.01	Start 6621.00 hold at 3113.56 MD	
9,734.56	9,721.00	-196.67	-179.01	TD at 9734.56	



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 921-35G Pad

NBU 921-35G4BS

OH

Plan: PLAN #1

Standard Planning Report - Geographic

28 October, 2010

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 921-35G Pad, SEC 35 T9S R21E				
Site Position:	Northing:	14,527,383.91 usft	Latitude:	39° 59' 38.969 N	
From: Lat/Long	Easting:	2,056,474.61 usft	Longitude:	109° 30' 52.358 W	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35G4BS, 2053' FNL 1643' FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,527,384.14 usft	Latitude:	39° 59' 38.976 N
	+E/-W	0.00 ft	Easting:	2,056,444.90 usft	Longitude:	109° 30' 52.740 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,119.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/28/2010	11.16	65.88	52,385

Design	PLAN #1			
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	222.31

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	
604.14	6.08	222.31	603.57	-11.93	-10.86	2.00	2.00	0.00	222.31	
2,809.42	6.08	222.31	2,796.43	-184.74	-168.15	0.00	0.00	0.00	0.00	
3,113.56	0.00	0.00	3,100.00	-196.67	-179.01	2.00	-2.00	0.00	180.00	
9,734.56	0.00	0.00	9,721.00	-196.67	-179.01	0.00	0.00	0.00	0.00	NBU 921-35G4BS_PI

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	14,527,384.14	2,056,444.90	39° 59' 38.976 N	109° 30' 52.740 W	
100.00	0.00	0.00	100.00	0.00	0.00	14,527,384.14	2,056,444.90	39° 59' 38.976 N	109° 30' 52.740 W	
200.00	0.00	0.00	200.00	0.00	0.00	14,527,384.14	2,056,444.90	39° 59' 38.976 N	109° 30' 52.740 W	
300.00	0.00	0.00	300.00	0.00	0.00	14,527,384.14	2,056,444.90	39° 59' 38.976 N	109° 30' 52.740 W	
Start Build 2.00										
400.00	2.00	222.31	399.98	-1.29	-1.17	14,527,382.83	2,056,443.75	39° 59' 38.963 N	109° 30' 52.755 W	
500.00	4.00	222.31	499.84	-5.16	-4.70	14,527,378.91	2,056,440.29	39° 59' 38.925 N	109° 30' 52.800 W	
600.00	6.00	222.31	599.45	-11.61	-10.56	14,527,372.36	2,056,434.54	39° 59' 38.861 N	109° 30' 52.876 W	
604.14	6.08	222.31	603.57	-11.93	-10.86	14,527,372.04	2,056,434.25	39° 59' 38.858 N	109° 30' 52.880 W	
Start 2205.28 hold at 604.14 MD										
700.00	6.08	222.31	698.89	-19.44	-17.69	14,527,364.41	2,056,427.54	39° 59' 38.784 N	109° 30' 52.967 W	
800.00	6.08	222.31	798.33	-27.28	-24.83	14,527,356.46	2,056,420.54	39° 59' 38.706 N	109° 30' 53.059 W	
900.00	6.08	222.31	897.76	-35.11	-31.96	14,527,348.50	2,056,413.53	39° 59' 38.629 N	109° 30' 53.151 W	
1,000.00	6.08	222.31	997.20	-42.95	-39.09	14,527,340.55	2,056,406.53	39° 59' 38.551 N	109° 30' 53.242 W	
1,100.00	6.08	222.31	1,096.64	-50.79	-46.23	14,527,332.60	2,056,399.53	39° 59' 38.474 N	109° 30' 53.334 W	
1,200.00	6.08	222.31	1,196.07	-58.62	-53.36	14,527,324.64	2,056,392.53	39° 59' 38.397 N	109° 30' 53.426 W	
1,300.00	6.08	222.31	1,295.51	-66.46	-60.49	14,527,316.69	2,056,385.53	39° 59' 38.319 N	109° 30' 53.517 W	
1,400.00	6.08	222.31	1,394.95	-74.29	-67.62	14,527,308.73	2,056,378.53	39° 59' 38.242 N	109° 30' 53.609 W	
1,491.57	6.08	222.31	1,486.00	-81.47	-74.15	14,527,301.45	2,056,372.12	39° 59' 38.171 N	109° 30' 53.693 W	
GREEN RIVER										
1,500.00	6.08	222.31	1,494.39	-82.13	-74.76	14,527,300.78	2,056,371.53	39° 59' 38.164 N	109° 30' 53.701 W	
1,600.00	6.08	222.31	1,593.82	-89.97	-81.89	14,527,292.83	2,056,364.53	39° 59' 38.087 N	109° 30' 53.792 W	
1,700.00	6.08	222.31	1,693.26	-97.80	-89.02	14,527,284.87	2,056,357.53	39° 59' 38.009 N	109° 30' 53.884 W	
1,800.00	6.08	222.31	1,792.70	-105.64	-96.15	14,527,276.92	2,056,350.52	39° 59' 37.932 N	109° 30' 53.976 W	
1,900.00	6.08	222.31	1,892.13	-113.48	-103.29	14,527,268.96	2,056,343.52	39° 59' 37.854 N	109° 30' 54.067 W	
2,000.00	6.08	222.31	1,991.57	-121.31	-110.42	14,527,261.01	2,056,336.52	39° 59' 37.777 N	109° 30' 54.159 W	
2,100.00	6.08	222.31	2,091.01	-129.15	-117.55	14,527,253.05	2,056,329.52	39° 59' 37.699 N	109° 30' 54.251 W	
2,200.00	6.08	222.31	2,190.44	-136.99	-124.68	14,527,245.10	2,056,322.52	39° 59' 37.622 N	109° 30' 54.342 W	
2,300.00	6.08	222.31	2,289.88	-144.82	-131.82	14,527,237.15	2,056,315.52	39° 59' 37.544 N	109° 30' 54.434 W	
2,400.00	6.08	222.31	2,389.32	-152.66	-138.95	14,527,229.19	2,056,308.52	39° 59' 37.467 N	109° 30' 54.526 W	
2,500.00	6.08	222.31	2,488.76	-160.50	-146.08	14,527,221.24	2,056,301.52	39° 59' 37.390 N	109° 30' 54.617 W	
2,600.00	6.08	222.31	2,588.19	-168.33	-153.22	14,527,213.28	2,056,294.52	39° 59' 37.312 N	109° 30' 54.709 W	
2,630.98	6.08	222.31	2,619.00	-170.76	-155.43	14,527,210.82	2,056,292.35	39° 59' 37.288 N	109° 30' 54.737 W	
8 5/8"										
2,700.00	6.08	222.31	2,687.63	-176.17	-160.35	14,527,205.33	2,056,287.51	39° 59' 37.235 N	109° 30' 54.801 W	
2,800.00	6.08	222.31	2,787.07	-184.00	-167.48	14,527,197.38	2,056,280.51	39° 59' 37.157 N	109° 30' 54.892 W	
2,809.42	6.08	222.31	2,796.43	-184.74	-168.15	14,527,196.63	2,056,279.85	39° 59' 37.150 N	109° 30' 54.901 W	
Start Drop -2.00										
2,900.00	4.27	222.31	2,886.64	-190.79	-173.65	14,527,190.49	2,056,274.45	39° 59' 37.090 N	109° 30' 54.972 W	
3,000.00	2.27	222.31	2,986.47	-195.01	-177.50	14,527,186.21	2,056,270.68	39° 59' 37.048 N	109° 30' 55.021 W	
3,100.00	0.27	222.31	3,086.44	-196.65	-178.99	14,527,184.54	2,056,269.22	39° 59' 37.032 N	109° 30' 55.040 W	
3,113.56	0.00	0.00	3,100.00	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
Start 6621.00 hold at 3113.56 MD										
3,200.00	0.00	0.00	3,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,300.00	0.00	0.00	3,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,400.00	0.00	0.00	3,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,500.00	0.00	0.00	3,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,600.00	0.00	0.00	3,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,700.00	0.00	0.00	3,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,800.00	0.00	0.00	3,786.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
3,900.00	0.00	0.00	3,886.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,000.00	0.00	0.00	3,986.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,100.00	0.00	0.00	4,086.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,200.00	0.00	0.00	4,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,300.00	0.00	0.00	4,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,400.00	0.00	0.00	4,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,500.00	0.00	0.00	4,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,600.00	0.00	0.00	4,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,700.00	0.00	0.00	4,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,769.56	0.00	0.00	4,756.00	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
WASATCH										
4,800.00	0.00	0.00	4,786.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
4,900.00	0.00	0.00	4,886.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,000.00	0.00	0.00	4,986.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,100.00	0.00	0.00	5,086.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,200.00	0.00	0.00	5,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,300.00	0.00	0.00	5,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,400.00	0.00	0.00	5,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,500.00	0.00	0.00	5,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,600.00	0.00	0.00	5,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,700.00	0.00	0.00	5,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,800.00	0.00	0.00	5,786.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
5,900.00	0.00	0.00	5,886.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,000.00	0.00	0.00	5,986.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,100.00	0.00	0.00	6,086.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,200.00	0.00	0.00	6,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,300.00	0.00	0.00	6,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,400.00	0.00	0.00	6,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,500.00	0.00	0.00	6,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,600.00	0.00	0.00	6,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,700.00	0.00	0.00	6,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,800.00	0.00	0.00	6,786.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
6,900.00	0.00	0.00	6,886.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,000.00	0.00	0.00	6,986.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,100.00	0.00	0.00	7,086.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,200.00	0.00	0.00	7,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,300.00	0.00	0.00	7,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,400.00	0.00	0.00	7,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,495.56	0.00	0.00	7,482.00	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
MESAVERDE										
7,500.00	0.00	0.00	7,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,600.00	0.00	0.00	7,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,700.00	0.00	0.00	7,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,800.00	0.00	0.00	7,786.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
7,900.00	0.00	0.00	7,886.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,000.00	0.00	0.00	7,986.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,100.00	0.00	0.00	8,086.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,200.00	0.00	0.00	8,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,300.00	0.00	0.00	8,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,400.00	0.00	0.00	8,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,500.00	0.00	0.00	8,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,600.00	0.00	0.00	8,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,700.00	0.00	0.00	8,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,800.00	0.00	0.00	8,786.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
8,900.00	0.00	0.00	8,886.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,000.00	0.00	0.00	8,986.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,100.00	0.00	0.00	9,086.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,200.00	0.00	0.00	9,186.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	

Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 921-35G4BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 5119' & KB 14' @ 5133.00ft (ASSUMED)
Site:	NBU 921-35G Pad	North Reference:	True
Well:	NBU 921-35G4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,300.00	0.00	0.00	9,286.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,400.00	0.00	0.00	9,386.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,500.00	0.00	0.00	9,486.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,600.00	0.00	0.00	9,586.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,700.00	0.00	0.00	9,686.44	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
9,734.56	0.00	0.00	9,721.00	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	
NBU 921-35G4BS_PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
NBU 921-35G4BS_PBHL - hit/miss target - Shape - Circle (radius 25.00)	0.00	0.00	9,721.00	-196.67	-179.01	14,527,184.52	2,056,269.20	39° 59' 37.032 N	109° 30' 55.040 W	

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,630.98	2,619.00	8 5/8"	8.625	11.000		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,491.57	1,486.00	GREEN RIVER				
4,769.56	4,756.00	WASATCH				
7,495.56	7,482.00	MESAVERDE				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
604.14	603.57	-11.93	-10.86	Start 2205.28 hold at 604.14 MD	
2,809.42	2,796.43	-184.74	-168.15	Start Drop -2.00	
3,113.56	3,100.00	-196.67	-179.01	Start 6621.00 hold at 3113.56 MD	
9,734.56	9,721.00	-196.67	-179.01	TD at 9734.56	

NBU 921-35G1BS

Surface: 2,053' FNL 1,633' FEL (SW/4NE/4)
BHL: 1,583' FNL 1,819' FEL (SW/4NE/4)

NBU 921-35G1CS

Surface: 2,053' FNL 1,653' FEL (SW/4NE/4)
BHL: 1,916' FNL 1,820' FEL (SW/4NE/4)

NBU 921-35G4BS

Surface: 2,053' FNL 1,643' FEL (SW/4NE/4)
BHL: 2,250' FNL 1,822' FEL (SW/4NE/4)

NBU 921-35G4CS

Surface: 2,053' FNL 1,623' FEL (SW/4NE/4)
BHL: 2,583' FNL 1,823' FEL (SW/4NE/4)

NBU 921-35J1BS

Surface: 2,053' FNL 1,613' FEL (SW/4NE/4)
BHL: 2,419' FSL 1,824' FEL (NW/4SE/4)

Pad: NBU 921-35G
Section 35 T9S R21E
Mineral Lease: ML 22582

Uintah County, Utah
Operator: Kerr-McGee Oil & Gas Onshore LP

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

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 roads and improved/unimproved lease roads. APC/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:

Approximately $\pm 40'$ (0.01 miles) of road re-route is proposed (see Topo Map B). 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.

Where roads 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.

Turnouts; major cut and fills; culverts; bridges; gates; cattle guards; low water crossings; or modifications needed to existing infrastructure/facilities were determined at the on-site and, 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 CIGE 204. This well location is a shut-in well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of November 11, 2010.

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

Production facilities will be installed on the disturbed portion of each 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) aboveground 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.

Production tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks are not to be used for disposal of liquids from additional sources without prior approval of UDOGM.

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 $\pm 5,100'$ and the individual segments are broken up as follows:

- $\pm 150'$ (0.03 miles) –New 6” buried gas pipeline from the meter to the edge of the pad.
- $\pm 370'$ (0.1 miles) –New 6” buried gas pipeline from the edge of pad to the NBU 921-35H pad intersection.
- $\pm 3,160'$ (0.6 miles) –New 8” buried gas pipeline from the NBU 921-35H pad intersection to the NBU 921-35K pad intersection.
- $\pm 920'$ (0.2 miles) –New 12” buried gas pipeline from the NBU 921-35K pad intersection to the NBU 921-35M pad intersection.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 5,100'$ and the individual segments are broken up as follows:

- $\pm 150'$ (0.03 miles) –New 6” buried liquid pipeline from the separator to the edge of the pad.
- $\pm 370'$ (0.1 miles) –New 6” buried liquid pipeline from the edge of pad to the NBU 921-35H pad intersection.
- $\pm 3,160'$ (0.6 miles) –New 6” buried liquid pipeline from the NBU 921-35H pad intersection to the NBU 921-35M pad intersection.
- $\pm 1,420'$ (0.3 miles) –New 6” buried liquid pipeline from the NBU 921-35M pad intersection to the existing buried liquid pipeline.

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. Kerr-McGee 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, Kerr-McGee requests a temporary 45' construction right-of-way and 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, ownership, and 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 of 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 to subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

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

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

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

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

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

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, 1983 (NAD83) 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 are not limited to: 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 APC/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

K. Other Information:

None

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

Danielle Piernot
 Regulatory Analyst I
 Kerr-McGee Oil & Gas Onshore LP
 PO Box 173779
 Denver, CO 80217-3779
 (720) 929-6156

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.



 Danielle Piernot

December 13, 2010

 Date

'APIWellNo:43047513620000'



Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
DENVER, CO 80217-3779

October 25, 2010

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 921-35G4BS
T9S-R21E
Section 35: SWNE (Surf), SWNE (Bottom)
Surface: 2053' FNL, 1643' FEL
Bottom Hole: 2250' FNL, 1822' 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 Directional Drilling.

- Kerr-McGee's NBU 921-35G4BS 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,

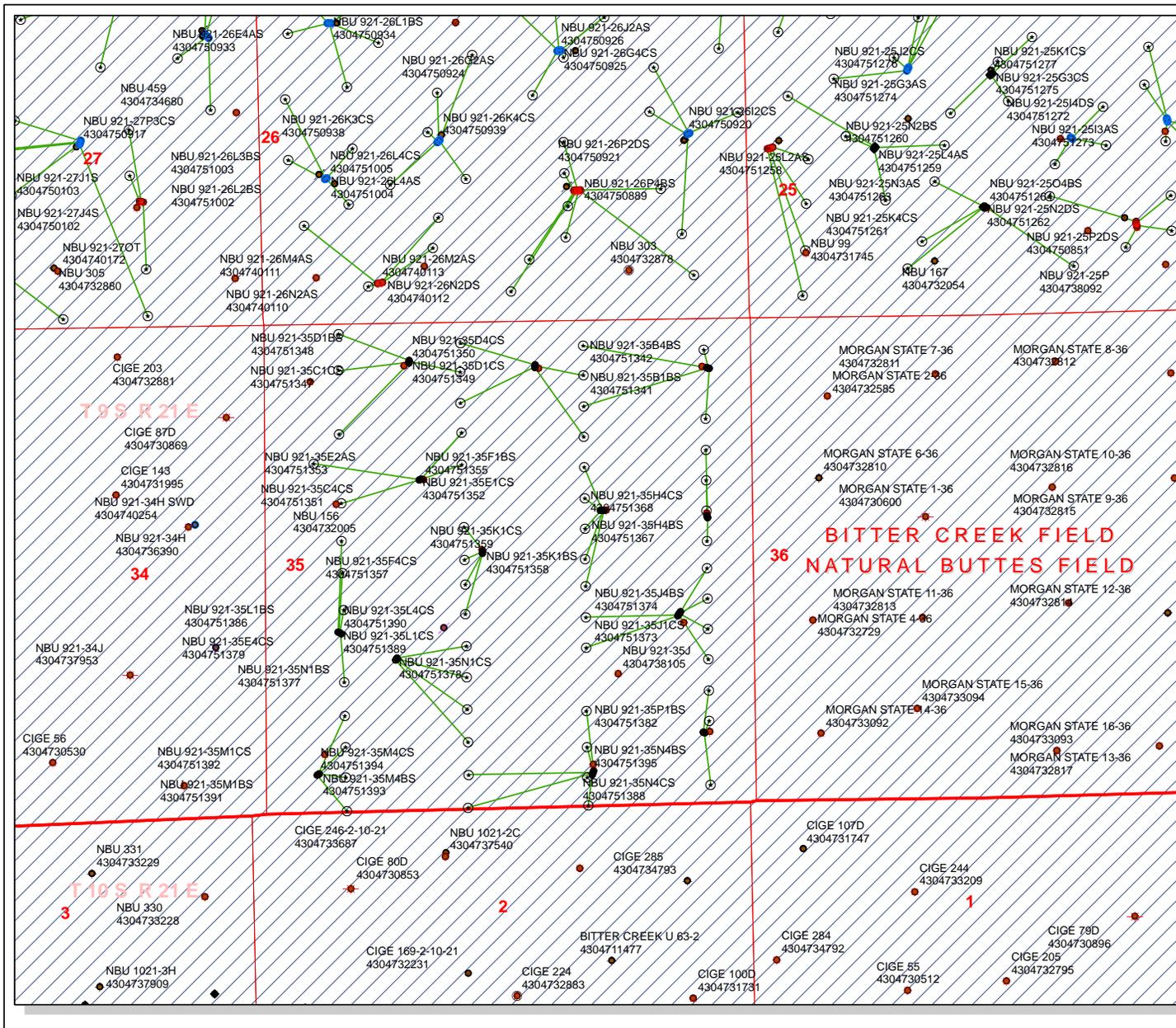
KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink that reads 'Joe Matney'.

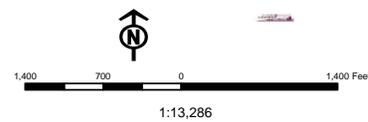
Joe Matney
Sr. Staff Landman

API Number: 4304751362
Well Name: NBU 921-35G4BS
Township 09.0 S Range 21.0 E Section 35
Meridian: SLBM
 Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
 Map Produced by Diana Mason



- | | |
|-----------------------------|--------------------------------------|
| Units | Wells Query |
| ACTIVE | ✕ - call other values- |
| EXPLORATORY | ◆ APD - Approved Permit |
| GAS STORAGE | ● DRL - Spudded (Drilling Commenced) |
| NF PP OIL | ○ NF PP OIL |
| NF SECONDARY | ★ GS - Gas Storage |
| PI OIL | ✕ LA - Location Abandoned |
| PP GAS | ⊕ LOC - New Location |
| PP GEOTHERML | ⊖ OPS - Operation Suspended |
| PP OIL | ⊖ PA - Plugged Abandoned |
| SECONDARY | ★ PGW - Producing Gas Well |
| TERMINATED | ● POW - Producing Oil Well |
| Fields | ⊖ RET - Returned APD |
| Sections | ⊖ SGW - Shut-in Gas Well |
| Township | ⊖ SWI - Shut-in Oil Well |
| Bottom Hole Location - AGRC | ⊖ TA - Temp. Abandoned |
| | ○ TW - Test Well |
| | ⊖ WDW - Water Disposal |
| | ⊖ WWI - Water Injection Well |
| | ● WSW - Water Supply Well |



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)

December 1, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 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 2010 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
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(Proposed PZ WASATCH-MESA VERDE)

NBU 921-35F2 Pad

43-047-51355	NBU 921-35F1BS	Sec 35 T09S R21E 1684 FNL 1709 FWL
	BHL	Sec 35 T09S R21E 1531 FNL 2146 FWL

NBU 921-35F4 PAD

43-047-51356	NBU 921-35F4BS	Sec 35 T09S R21E 2473 FNL 2358 FWL
	BHL	Sec 35 T09S R21E 2210 FNL 2158 FWL

43-047-51357	NBU 921-35F4CS	Sec 35 T09S R21E 2483 FNL 2358 FWL
	BHL	Sec 35 T09S R21E 2567 FNL 2159 FWL

43-047-51358	NBU 921-35K1BS	Sec 35 T09S R21E 2493 FNL 2358 FWL
	BHL	Sec 35 T09S R21E 2484 FSL 2161 FWL

43-047-51359	NBU 921-35K1CS	Sec 35 T09S R21E 2503 FNL 2357 FWL
	BHL	Sec 35 T09S R21E 2163 FSL 2155 FWL

NBU 921-35G Pad

43-047-51360	NBU 921-35G1BS	Sec 35 T09S R21E 2053 FNL 1633 FEL
	BHL	Sec 35 T09S R21E 1583 FNL 1819 FEL

43-047-51361	NBU 921-35G1CS	Sec 35 T09S R21E 2053 FNL 1653 FEL
	BHL	Sec 35 T09S R21E 1916 FNL 1820 FEL

43-047-51362	NBU 921-35G4BS	Sec 35 T09S R21E 2053 FNL 1643 FEL
	BHL	Sec 35 T09S R21E 2250 FNL 1822 FEL

API #	WELL NAME			LOCATION						
(Proposed PZ WASATCH-MESA VERDE)										
43-047-51363	NBU 921-35G4CS	Sec	35	T09S	R21E	2053	FNL	1623	FEL	
	BHL	Sec	35	T09S	R21E	2583	FNL	1823	FEL	
43-047-51364	NBU 921-35J1BS	Sec	35	T09S	R21E	2053	FNL	1613	FEL	
	BHL	Sec	35	T09S	R21E	2419	FSL	1824	FEL	
NBU 921-35H PAD										
43-047-51365	NBU 921-35H1BS	Sec	35	T09S	R21E	2143	FNL	0486	FEL	
	BHL	Sec	35	T09S	R21E	1411	FNL	0494	FEL	
43-047-51366	NBU 921-35H1CS	Sec	35	T09S	R21E	2133	FNL	0490	FEL	
	BHL	Sec	35	T09S	R21E	1743	FNL	0495	FEL	
43-047-51367	NBU 921-35H4BS	Sec	35	T09S	R21E	2124	FNL	0493	FEL	
	BHL	Sec	35	T09S	R21E	2075	FNL	0495	FEL	
43-047-51368	NBU 921-35H4CS	Sec	35	T09S	R21E	2152	FNL	0483	FEL	
	BHL	Sec	35	T09S	R21E	2407	FNL	0495	FEL	
NBU 921-35I PAD										
43-047-51369	NBU 921-35I1BS	Sec	35	T09S	R21E	2106	FSL	0794	FEL	
	BHL	Sec	35	T09S	R21E	2572	FSL	0496	FEL	
43-047-51370	NBU 921-35I1CS	Sec	35	T09S	R21E	2098	FSL	0800	FEL	
	BHL	Sec	35	T09S	R21E	2240	FSL	0496	FEL	
43-047-51371	NBU 921-35I4BS	Sec	35	T09S	R21E	2090	FSL	0806	FEL	
	BHL	Sec	35	T09S	R21E	1908	FSL	0496	FEL	
43-047-51372	NBU 921-35I4CS	Sec	35	T09S	R21E	2082	FSL	0811	FEL	
	BHL	Sec	35	T09S	R21E	1577	FSL	0497	FEL	
43-047-51373	NBU 921-35J1CS	Sec	35	T09S	R21E	2074	FSL	0817	FEL	
	BHL	Sec	35	T09S	R21E	2086	FSL	1825	FEL	
43-047-51374	NBU 921-35J4BS	Sec	35	T09S	R21E	2066	FSL	0823	FEL	
	BHL	Sec	35	T09S	R21E	1752	FSL	1826	FEL	
NBU 921-35K PAD										
43-047-51375	NBU 921-35K4BS	Sec	35	T09S	R21E	1710	FSL	1409	FWL	
	BHL	Sec	35	T09S	R21E	1814	FSL	2165	FWL	
43-047-51376	NBU 921-35K4CS	Sec	35	T09S	R21E	1702	FSL	1403	FWL	
	BHL	Sec	35	T09S	R21E	1469	FSL	2163	FWL	
43-047-51377	NBU 921-35N1BS	Sec	35	T09S	R21E	1694	FSL	1397	FWL	
	BHL	Sec	35	T09S	R21E	1124	FSL	2161	FWL	
43-047-51378	NBU 921-35N1CS	Sec	35	T09S	R21E	1686	FSL	1392	FWL	
	BHL	Sec	35	T09S	R21E	0771	FSL	2162	FWL	

API #	WELL NAME	LOCATION									
NBU 921-35L PAD											
43-047-51379	NBU 921-35E4CS	Sec 35	T09S	R21E	2016	FSL	0768	FWL			
	BHL	Sec 35	T09S	R21E	2343	FNL	0823	FWL			
43-047-51386	NBU 921-35L1BS	Sec 35	T09S	R21E	2013	FSL	0778	FWL			
	BHL	Sec 35	T09S	R21E	2658	FSL	0826	FWL			
43-047-51389	NBU 921-35L1CS	Sec 35	T09S	R21E	2009	FSL	0787	FWL			
	BHL	Sec 35	T09S	R21E	2255	FSL	0835	FWL			
43-047-51390	NBU 921-35L4CS	Sec 35	T09S	R21E	2005	FSL	0796	FWL			
	BHL	Sec 35	T09S	R21E	1470	FSL	0832	FWL			
NBU 921-35P PAD											
43-047-51380	NBU 921-35P4CS	Sec 35	T09S	R21E	0781	FSL	0557	FEL			
	BHL	Sec 35	T09S	R21E	0208	FSL	0489	FEL			
43-047-51381	NBU 921-35P1CS	Sec 35	T09S	R21E	0778	FSL	0547	FEL			
	BHL	Sec 35	T09S	R21E	0913	FSL	0497	FEL			
43-047-51382	NBU 921-35P1BS	Sec 35	T09S	R21E	0785	FSL	0566	FEL			
	BHL	Sec 35	T09S	R21E	1245	FSL	0497	FEL			
NBU 921-35O PAD											
43-047-51383	NBU 921-35O4CS	Sec 35	T09S	R21E	0360	FSL	1780	FEL			
	BHL	Sec 35	T09S	R21E	0026	FSL	1826	FEL			
43-047-51384	NBU 921-35O4BS	Sec 35	T09S	R21E	0370	FSL	1777	FEL			
	BHL	Sec 35	T09S	R21E	0336	FSL	1833	FEL			
43-047-51385	NBU 921-35O1CS	Sec 35	T09S	R21E	0398	FSL	1766	FEL			
	BHL	Sec 35	T09S	R21E	0674	FSL	1828	FEL			
43-047-51387	NBU 921-35O1BS	Sec 35	T09S	R21E	0407	FSL	1763	FEL			
	BHL	Sec 35	T09S	R21E	1059	FSL	1833	FEL			
43-047-51388	NBU 921-35N4CS	Sec 35	T09S	R21E	0379	FSL	1773	FEL			
	BHL	Sec 35	T09S	R21E	0051	FSL	2153	FWL			
43-047-51395	NBU 921-35N4BS	Sec 35	T09S	R21E	0388	FSL	1770	FEL			
	BHL	Sec 35	T09S	R21E	0410	FSL	2164	FWL			
NBU 921-35M PAD											
43-047-51391	NBU 921-35M1BS	Sec 35	T09S	R21E	0469	FSL	0526	FWL			
	BHL	Sec 35	T09S	R21E	1096	FSL	0830	FWL			
43-047-51392	NBU 921-35M1CS	Sec 35	T09S	R21E	0474	FSL	0534	FWL			
	BHL	Sec 35	T09S	R21E	0760	FSL	0830	FWL			

API #	WELL NAME	LOCATION
43-047-51393	NBU 921-35M4BS	Sec 35 T09S R21E 0478 FSL 0543 FWL BHL Sec 35 T09S R21E 0423 FSL 0831 FWL
43-047-51394	NBU 921-35M4CS	Sec 35 T09S R21E 0464 FSL 0517 FWL BHL Sec 35 T09S R21E 0055 FSL 0834 FWL

This office has no objection to permitting the wells at this time.

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: 2010.12.01 10:03:00 -07'00'

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

MCoulthard:mc:12-1-10

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-35G4BS 430475136			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2409	9721		
Previous Shoe Setting Depth (TVD)	40	2409		
Max Mud Weight (ppg)	8.3	12.0		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5930	11.7		

Calculations	Surf String	8.625	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	1043	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	754	NO <input type="text" value="air drill"/>
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	513	NO <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	522	NO <input type="text" value="Reasonable depth in area"/>
Required Casing/BOPE Test Pressure=		2373	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

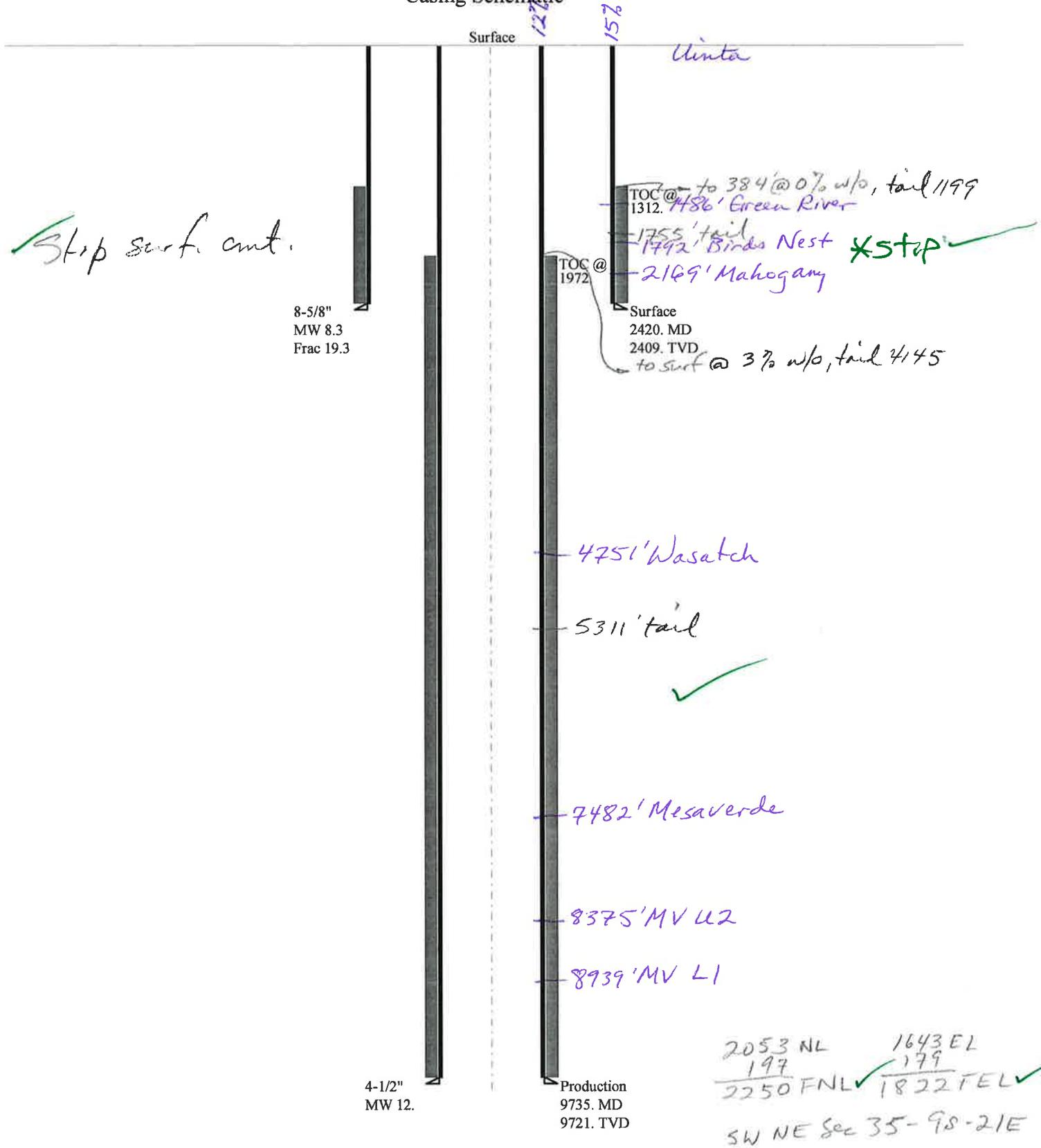
Calculations	Prod String	4.500	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	6066	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	4899	YES <input type="text"/>
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	3927	YES <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	4457	NO <input type="text" value="Reasonable"/>
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2409	psi *Assumes 1psi/ft frac gradient

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

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

43047513620000 NBU 921-35G4BS

Casing Schematic



Well name:	43047513620000 NBU 921-35G4BS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Surface	Project ID:	43-047-51362
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: 108 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,312 ft

Burst

Max anticipated surface pressure: 2,130 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,419 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: 2,122 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 209 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 6.08 °

Re subsequent strings:

Next setting depth: 9,721 ft
Next mud weight: 12.000 ppg
Next setting BHP: 6,060 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,420 ft
Injection pressure: 2,420 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	2420	8.625	28.00	I-55	LT&C	2409	2420	7.892	95832
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	1043	1880	1.803	2419	3390	1.40	67.5	348	5.16 J

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

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

Date: December 9, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2409 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:	43047513620000 NBU 921-35G4BS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Production	Project ID:	43-047-51362
Location:	UINTAH	COUNTY	

Design parameters:

Collapse

Mud weight: 12.000 ppg
 Internal fluid density: 1.000 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 210 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 100 ft

Cement top: 1,972 ft

Burst

Max anticipated surface pressure: 3,921 psi
 Internal gradient: 0.220 psi/ft
 Calculated BHP 6,060 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)

Directional Info - Build & Drop

Kick-off point 300 ft
 Departure at shoe: 266 ft
 Maximum dogleg: 2 °/100ft
 Inclination at shoe: 0 °

Tension is based on air weight.
 Neutral point: 7,991 ft

Estimated cost: 127,416 (\$)

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
2	9600	4.5	11.60	I-80	LT&C	9586	9600	3.875	126720
1	135	4.5	11.60	HCP-110	Buttress	9721	9735	3.875	696

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2	5478	6350	1.159	6030	7780	1.29	112.8	212	1.88 J
1	5555	8650	1.557	6060	10690	1.76	1.6	367.2	99.99 B

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

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

Date: December 9, 2010
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9721 ft, a mud weight of 12 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to 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

From: Jim Davis
To: Bonner, Ed; Hill, Brad; Mason, Diana
CC: Curry, Kristine; Danielle Piernot; Garrison, LaVonne; Hayden, Martha;...
Date: 12/22/2010 5:49 AM
Subject: Kerr McGee APD approvals in 9S 21E Sec 35
Attachments: KMG approvals 921-35 on 12.22.2010.xls

The following wells have been approved by SITLA under the following arch and paleo stipulations. This is a long list, so I'm attaching a spreadsheet with the same information.

A note on arch and paleo stipulations: Wells that have an arch note "non-significant site" do not need to be avoided or mitigated. Only those that say "needs to be avoided".

The paleo reports make recommendations for "spot paleo monitoring" or "full paleo monitoring". It is my understanding that Kerr McGee is taking these stipulations and doing full monitoring in either case, in an abundance of caution.

-Jim Davis

Well Name	API	Paleo Stipulations	Arch Stipulations
Kerr-McGee's NBU 921-35A1BS (U-07-MQ-1437b,i,p,s)		API #4304751339	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35A4CS (U-07-MQ-1437b,i,p,s)		API #4304751340	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B1BS (U-07-MQ-1437b,i,p,s)		API #4304751341	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B4BS (U-07-MQ-1437b,i,p,s)		API #4304751342	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B1CS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751343	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35B4CS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751344	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35C1BS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751345	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35C4BS (U-07-MQ-1437b,i,p,s; eligible site 42Un6461, just south of proposed pipeline needs to be avoided)		API #4304751346	IPC 10-98 Spot Paleo Monitoring
Kerr-McGee's NBU 921-35C1CS (U-07-MQ-1437b,i,p,s)		API #4304751347	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35D1BS (U-07-MQ-1437b,i,p,s)		API #4304751348	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35D1CS (U-07-MQ-1437b,i,p,s)		API #4304751349	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35D4CS (U-07-MQ-1437b,i,p,s)		API #4304751350	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35C4CS (U-07-MQ-1437b,i,p,s)		API #4304751351	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35E1CS (U-07-MQ-1437b,i,p,s)		API #4304751352	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35E2AS (U-07-MQ-1437b,i,p,s)		API #4304751353	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35F1BS (U-07-MQ-1437b,i,p,s)		API #4304751355	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35F4BS (U-07-MQ-1437b,i,p,s)		API #4304751356	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35F4CS (U-07-MQ-1437b,i,p,s)		API #4304751357	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35K1BS		API #4304751358	IPC 10-97 Full Paleo Monitoring (U-07-MQ-1437b,i,p,s)

MQ-1437b,i,p,s)			
Kerr-McGee's NBU 921-35K1CS	API #4304751359	IPC 10-97 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35G1BS	API #4304751360	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35G1CS	API #4304751361	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35G4BS	API #4304751362	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35G4CS	API #4304751363	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35J1S	API #4304751364	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un2395, adjacent to the road)
Kerr-McGee's NBU 921-35H1BS	API #4304751365	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35H1CS	API #4304751366	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35H4BS	API #4304751367	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35H4CS	API #4304751368	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I1BS	API #4304751369	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I1CS	API #4304751370	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I4BS	API #4304751371	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35I4CS	API #4304751372	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35J1CS	API #4304751373	IPC 10-98 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35J4BS	API #4304751374	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35K4BS	API #4304751375	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35K4CS	API #4304751376	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35N1BS	API #4304751377	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35N1CS	API #4304751378	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35E4CS	API #4304751379	IPC 10-99 Spot Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35P4CS	API #4304751380	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35P1CS	API #4304751381	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35P1BS	API #4304751382	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s)
Kerr-McGee's NBU 921-35O4CS	API #4304751383	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)
Kerr-McGee's NBU 921-35O4BS	API #4304751384	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)
Kerr-McGee's NBU 921-35O1CS	API #4304751385	IPC 10-100 Full Paleo Monitoring	(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)
Kerr-McGee's NBU 921-35L1BS	API #4304751386	IPC 10-99 Spot Paleo Monitoring	

(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35O1BS	API #4304751387	IPC 10-100 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)		
Kerr-McGee's NBU 921-35N4CS	API #4304751388	IPC 10-100 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)		
Kerr-McGee's NBU 921-35L1CS	API #4304751389	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35L4CS	API #4304751390	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M1BS	API #4304751391	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M1CS	API #4304751392	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M4BS	API #4304751393	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35M4CS	API #4304751394	IPC 10-99 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s)		
Kerr-McGee's NBU 921-35N4BS	API #4304751395	IPC 10-100 Spot Paleo Monitoring
(U-07-MQ-1437b,i,p,s; 1 non-significant site, 42Un1836, adjacent to pipeline)		

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P.
Well Name NBU 921-35G4BS
API Number 43047513620000 **APD No** 3195 **Field/Unit** NATURAL BUTTES
Location: 1/4,1/4 SWNE **Sec** 35 **Tw** 9.0S **Rng** 21.0E 2053 **FNL** 1643 **FEL**
GPS Coord (UTM) **Surface Owner**

Participants

See other comments:

Regional/Local Setting & Topography

The general area is within the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 37 air miles and 44.3 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads to the site. Topography of the Sand Wash area is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs, furnishing water for antelope or livestock.

The NBU 921-35G pad will be created by significantly enlarging the existing pad of the CIGE 204 gas well. It will be enlarged in all directions. Five gas wells, to be directionally drilled, will be added. They are the NBU 921-35G1CS, NBU 921-35G4BS, NBU 921-35G1BS, MBU 921-35G4CS and NBU 921-35J1BS. The site is in moderately hilly terrain. A draw exists to the north and limits the expansion in this area. A hill to the south will be excavated for the reserve pit. On the northwest corner a short swale extends onto the site. It will be blocked with the topsoil stockpile. The access road at near Corner 2 will be changed. Here the edge of the pad will be beveled to provide a slope onto the pad for the road. A major tributary of Sand Wash is about 3/4 mile to the east of the site and the White River about 3 mile down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the only site in the immediate area.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

- Grazing
- Wildlfe Habitat
- Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	Width 352 Length 465	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is a poor desert shrub type, which includes rabbit brush, Indian ricegrass, stipa commata, greasewood, broom snakeweed, shadscale and halogeton.

Antelope, sheep during the winter, rabbits, coyotes, and small mammals, birds and raptors.

Soil Type and Characteristics

Surface soils are a shallow rocky sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? N

Berm Required? N

Erosion Sedimentation Control Required? Y

. On the northwest corner a short swale extends onto the site. It will be blocked with the topsoil stockpile

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

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 proposed reserve pit is 120' x 260' x 12' deep located in a cut on the southeast corner of the location. Kerr McGee plans a 30-mil liner with a double felt sub-liner.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 30 **Pit Underlayment Required?** Y

Other Observations / Comments

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Lovell Young, Grizz Oleen, Charles Chase, Colby Sutton, Doyle Holmes, Claudia Sass, (Kerr McGee), Mitch Batty, John Slaugh, (Timberline Engineering and Land Surveying), Jim Davis (SITLA) and Ben Williams, (UDWR).

Floyd Bartlett

11/30/2010

Evaluator

Date / Time

Application for Permit to Drill

Statement of Basis

12/27/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
3195	43047513620000	LOCKED	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 921-35G4BS		Unit	NATURAL BUTTES	
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	SWNE 35 9S 21E S 2053 FNL 1643 FEL GPS Coord (UTM)			626811E	4427950N

Geologic Statement of Basis

Kerr McGee proposes to set 2,420' 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 2,300'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 35. The well is listed as 2,640 feet deep and used for drilling water. 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. The proposed casing and cement should adequately protect. Any usable ground water.

Brad Hill
APD Evaluator

12/15/2010
Date / Time

Surface Statement of Basis

The general area is within the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 37 air miles and 44.3 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads to the site. Topography of the Sand Wash area is characterized by broad open flats dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. An occasional constructed pond occurs, furnishing water for antelope or livestock.

The NBU 921-35G pad will be created by significantly enlarging the existing pad of the CIGE 204 gas well. It will be enlarged in all directions. Five gas wells, to be directionally drilled, will be added. They are the NBU 921-35G1CS, NBU 921-35G4BS, NBU 921-35G1BS, MBU 921-35G4CS and NBU 921-35J1BS. The site is in moderately hilly terrain. A draw exists to the north and limits the expansion in this area. A hill to the south will be excavated for the reserve pit. On the northwest corner a short swale extends onto the site. It will be blocked with the topsoil stockpile. The access road at near Corner 2 will be changed. Here the edge of the pad will be beveled to provide a slope onto the pad for the road. A major tributary of Sand Wash is about 3/4 mile to the east of the site and the White River about 3 mile down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the only site in the immediate area.

Both the surface and minerals are owned by SITLA. Jim Davis represented SITLA at the pre-site investigation. Mr. Davis had no concerns pertaining to this location excepted as covered above. SITLA provided a seed mix to be used when reclaiming the site.

Ben Williams represented the Utah Division of Wildlife Resources. Mr. Williams stated the area is classified as crucial yearlong antelope habitat but recommended no restrictions for this species. No other wildlife will be significantly affected.

Floyd Bartlett
Onsite Evaluator

11/30/2010
Date / Time

Application for Permit to Drill Statement of Basis

12/27/2010

Utah Division of Oil, Gas and Mining

Page 2

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 30 mils with a double felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/23/2010

API NO. ASSIGNED: 43047513620000

WELL NAME: NBU 921-35G4BS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SWNE 35 090S 210E

Permit Tech Review:

SURFACE: 2053 FNL 1643 FEL

Engineering Review:

BOTTOM: 2250 FNL 1822 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.99411

LONGITUDE: -109.51459

UTM SURF EASTINGS: 626811.00

NORTHINGS: 4427950.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ML 22582

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: Permit #43-8496
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

LOCATION AND SITING:

- R649-2-3.
Unit: NATURAL BUTTES
 - R649-3-2. General
 - R649-3-3. Exception
 - Drilling Unit
Board Cause No: Cause 173-14
Effective Date: 12/2/1999
Siting: Suspends General Siting
 - R649-3-11. Directional Drill
-

Comments: Presite Completed

Stipulations: 3 - Commingling - 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 921-35G4BS
API Well Number: 43047513620000
Lease Number: ML 22582
Surface Owner: STATE
Approval Date: 12/27/2010

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.

Surface casing shall be cemented to the surface.

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

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 <https://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

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
 Submitted By ANDY LYTLE Phone Number 720.929.6100
 Well Name/Number NBU 921-35G4BS
 Qtr/Qtr SWNE Section 35 Township 9S Range 21E
 Lease Serial Number ML 22582
 API Number 4304751362

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

Date/Time 06/16/2011 14:00 HRS AM PM

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

- Surface Casing
 Intermediate Casing
 Production Casing
 Liner
 Other

RECEIVED

JUN 15 2011

DIV. OF OIL, GAS & MINING

Date/Time 07/03/2011 00:00 HRS AM PM

BOPE

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

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT

435.828.0986 OR LOVELL YOUNG AT 435.781.7051

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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:
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 921-35G4BS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047513620000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2053 FNL 1643 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 35 Township: 09.0S Range: 21.0E 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"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 6/16/2011	<input type="checkbox"/> CHANGE WELL STATUS	
<input type="checkbox"/> DRILLING REPORT Report Date:	<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 style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 06/16/2011 AT 1500 HRS.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst
SIGNATURE		DATE
N/A		6/20/2011

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-35G4BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513620000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2053 FNL 1643 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 35 Township: 09.0S Range: 21.0E 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"/> 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"/> SUBSEQUENT REPORT Date of Work Completion:		<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
<input type="checkbox"/> SPUD REPORT Date of Spud:		OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/2/2011		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU AIR RIG ON JUNE 30, 2011. DRILLED SURFACE HOLE TO 2450'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 7/5/2011	

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: 1368 SOUTH 1200 EAST
city VERNAL
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751361	NBU 921-35G1CS		SWNE	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	6/16/2011		<u>6/22/11</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSTMVD</u> SPUD WELL ON 06/16/2011 AT 1000 HRS. <u>BHL= SWNE</u>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751364	NBU 921-35J1BS		SWNE	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	6/16/2011		<u>6/22/11</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSTMVD</u> SPUD WELL ON 06/16/2011 AT 1000 HRS. <u>BHL= NWSE</u>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751362	NBU 921-35G4BS		SWNE	35	9S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	6/16/2011		<u>6/22/11</u>		
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSTMVD</u> SPUD WELL LOCATION ON 06/16/2011 AT 1500 HRS. <u>BHL= SWNE</u>							

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)

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

6/20/2011

Date

(9/2000)

RECEIVED

JUN 20 2011

DIV. OF OIL, GAS & MINING

BLM - Vernal Field Office - Notification Form

Operator KERR MCGEE Rig Name/# H&P 311
Submitted By DALTON KING Phone Number 435- 790-1884
Well Name/Number NBU 921-35G4BS
Qtr/Qtr SW/NE Section 35 Township 9S Range 21E
Lease Serial Number ML-22582
API Number 43-047-51362

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

Date/Time _____ AM PM

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

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

RECEIVED
AUG 08 2011
DIV. OF OIL, GAS & MINING

Date/Time _ _ AM PM

BOPE

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

Date/Time SAT. 8/8/2011 04:00 AM PM

Remarks TIME IS ESTIMATED, B&C QUICK TEST

BLM - Vernal Field Office - Notification Form

Operator KERR MCGEE Rig Name/# H&P 311
Submitted By DALTON KING Phone Number 435- 790-1884
Well Name/Number NBU 921-35G4BS
Qtr/Qtr SW/NE Section 35 Township 9S Range 21E
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- Liner
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RECEIVED
AUG 08 2011
DIV. OF OIL, GAS & MINING

Date/Time _ _ AM PM

BOPE

- Initial BOPE test at surface casing point
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- Other

Date/Time SAT. 8/8/2011 04:00 AM PM

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Date/Time _____ AM PM

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

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- Intermediate Casing
- Production Casing
- Liner
- Other

RECEIVED
AUG 15 2011
DIV. OF OIL, GAS & MINING

Date/Time SAT. 8/13/2011 17:00 AM PM

BOPE

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

Date/Time _____ AM PM

Remarks TIME IS ESTIMATED

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 921-35G4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047513620000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6515 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2053 FNL 1643 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 35 Township: 09.0S Range: 21.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

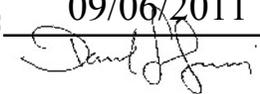
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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 checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/14/2011	<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: RIG REL. - ACTS PIT

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

MIRU ROTARY RIG. FINISHED DRILLING FROM 2450' TO 9765' ON AUGUST 12, 2011. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING TO 9534'. RAN 4 1/2" 11.6# P110 CSG FROM 9534' TO 9754'. CEMENTED PRODUCTION CASING. RELEASED H&P RIG 311 ON AUGUST 14, 2011 @ 06:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES. THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM.

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

Date: 09/06/2011
By: 

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/15/2011	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22582
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:
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 921-35G4BS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		9. API NUMBER: 43047513620000
PHONE NUMBER: 720 929-6515 Ext		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2053 FNL 1643 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 35 Township: 09.0S Range: 21.0E 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"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input checked="" 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"/> SUBSEQUENT REPORT Date of Work Completion:	<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 style="width: 50px;" type="text"/>	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<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	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 9/27/2011		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 09/27/2011 AT 2:00 PM. 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		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 9/29/2011	

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:
ML 22582

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 921-35G4BS

9. API NUMBER:
4304751362

10. FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
SWNE 35 9S 21E S

12. COUNTY
UINTAH

13. STATE
UTAH

14. DATE SPUDDED: **6/16/2011**

15. DATE T.D. REACHED: **8/12/2011**

16. DATE COMPLETED: **9/27/2011** *Bill Rev by JSM*

17. ELEVATIONS (DF, RKB, RT, GL):
5119 GL

18. TOTAL DEPTH: MD **9,765** TVD **9,752**

19. PLUG BACK T.D.: MD **9,710** TVD **9,697.87**

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
SYNTHETIC TRIPLE COMBO-CBL

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

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

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#	0	40		28			
11"	8 5/8" IJ-55	28#	0	2,431		830		0	
7 7/8"	4 1/2" I-80	11.6#	0	9,534		1,517		2220	
7 7/8"	4 1/2" P-110	11.6#	9,534	9,754					

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 3/8"	9,093							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) WASATCH	6,200	7,420			6,200 7,420	0.36	80	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B) MESAVERDE	7,651	9,522			7,651 9,522	0.36	160	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
6200 - 9522	PUMP 13,360 BBLs SLICK H2O & 289,871 LBS 30/50 OTTAWA SAND 10 STAGES

NOV 08 2011
DIV. OF OIL, GAS & MINING

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT DST REPORT DIRECTIONAL SURVEY

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER: _____

30. WELL STATUS:
PROD

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED: 9/27/2011		TEST DATE: 10/6/2011		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 1,839	WATER – BBL: 550	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,362	CSG. PRESS. 2,074	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 1,839	WATER – BBL: 550	INTERVAL STATUS: PROD

INTERVAL B (As shown in Item #26)

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

INTERVAL C (As shown in Item #26)

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

INTERVAL D (As shown in Item #26)

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

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

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	1,517
				BIRD'S NEST	1,825
				MAHOGANY	2,192
				WASATCH	4,783
				MESAVERDE	7,521

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 1/4" bit. The remainder of surface hole was drilled with an 11" bit. 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) JAIME SCHARNOWSKE

TITLE REGULATORY ANALYST

SIGNATURE *Jaime Scharnowske*

DATE 10/25/2011

This report must be submitted within 30 days of

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

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

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

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

Phone: 801-538-5340

Fax: 801-359-3940

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011		Spud Date: 6/30/2011	
Project: UTAH-UINTAH		Site: NBU 921-35G PAD		Rig Name No: PROPETRO 12/12, H&P 311/311	
Event: DRILLING		Start Date: 6/11/2011		End Date: 8/14/2011	
Active Datum: RKB @5,144.00usft (above Mean Sea Level)			UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/30/2011	4:00 - 6:30	2.50	DRLSUR	01	B	P		BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP. SET CATWALK AND PIPE RACKS. RIG UP
	6:30 - 8:00	1.50	DRLSUR	02	D	P		SPUD SURFACE 6/30/2011 06:30 HRS. DRILL 12.25" SURFACE HOLE F/40'-210' (170' @ 113'/HR) PSI ON/ OFF 450/200, UP/ DOWN/ ROT 32/30/31. 491 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
	8:00 - 8:30	0.50	DRLSUR	05	C	P		CIRCULATE THE 12 1/4 HOLE
	8:30 - 10:30	2.00	DRLSUR	06	A	P		LDDC PU AND SCRIBE DIRECTIONAL TOOLS
	10:30 - 14:30	4.00	DRLSUR	08	A	Z		WO WELDER AND REPAIR A PIN ON THE BACKUPS
	14:30 - 15:00	0.50	DRLSUR	06	A	P		FINISH P/U DC
	15:00 - 18:00	3.00	DRLSUR	02	D	P		DRILL 11" SURFACE HOLE F/210'-580' (370' @ 123.3'/HR) PSI ON/ OFF 450/200, UP/ DOWN/ ROT 50/46/48. 450 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
7/1/2011	18:00 - 0:00	6.00	DRLSUR	02	D	P		DRILL 11" SURFACE HOLE F/580'-1390' (810' @ 135'/HR) PSI ON/ OFF 1200/900, UP/ DOWN/ ROT 62/52/58. 491 GPM, MM/83 RPM, 45 RPM ON TOP DRIVE, 15-18K WOB
	0:00 - 7:30	7.50	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE F/1390'-2250' (860' @ 114.7'/HR) PSI ON/OFF 1200/900, UP/ DOWN/ ROT 74/56/64. 491 GPM, MM/83 RPM, 45 RPM ON TOP DRIVE, 15-18K WOB LOST RETURNS @ 1750' CIRCULATING RESERVE PIT W/ AIREATED WATER
	7:30 - 10:30	3.00	DRLSUR	08	B	Z		RIG REPAIR., FUEL FILTERS ON THE MUD PUMP
	10:30 - 15:00	4.50	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 2250'-2450' TD @ 15:00 7/1/2011 (190' @ 44.4 'HR) PSI ON/ OFF 1500 / 1180 , UP/ DN/ ROT 80/60/70, 120 SPM, 491 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE,MMRPM 83, CIRCULATING RESERVE PIT W/ AERATED WATER, LAST SURVEY @ 2395' 5.68 INC, 237.77 AZM , 1' LEFT & CENTERED VERTICALLY
	15:00 - 16:30	1.50	DRLSUR	05	C	P		CIRC/ COND HOLE F/ CASING
	16:30 - 20:00	3.50	DRLSUR	06	A	P		TOH AND LD THE BHA
	20:00 - 21:00	1.00	DRLSUR	12	A	P		RD/MOVE CATWALK AND PIPE RACKS SET UP TO RUN 8 5/8 CASING
7/2/2011	21:00 - 0:00	3.00	DRLSUR	12	C	P		RAN 55 JTS OF 85/8 / 28# / J-55 / 3T&C CASING. LANDED @ 2413 GL. BAFFLE PLATE @ 2374' GL.
	0:00 - 1:30	1.50	DRLSUR	01	C	P		RIG DOWN, SAFETY MEETING W/ PRO PETRO CEMENTERS,R/U INSTALL CEMENT HEAD, RUN 200' 1" PIPE DOWN BACK SIDE,

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011		Spud Date: 6/30/2011	
Project: UTAH-UINTAH		Site: NBU 921-35G PAD		Rig Name No: PROPETRO 12/12, H&P 311/311	
Event: DRILLING		Start Date: 6/11/2011		End Date: 8/14/2011	
Active Datum: RKB @5,144.00usft (above Mean Sea Level)			UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	1:30 - 8:00	6.50	DRLSUR	12	E	P		<p>PUMP 130 BBLS H2O AHEAD, 20 BBLS OF 8.4 GEL WATER AHEAD, 180 SX, 122.5 BBLS ,11#, 3.82 YLD LEAD, 200 SX, 41 BBLS 15.8, 1.15 YLD TAIL DISPLACE W/ 145 BBLS WATER, FINAL LIFT 260 PSI ,BUMP PLUG 7/1/2011 02:45 & HOLD 750 PSI F/ 5 MIN ,FLOAT HELD, NO RETURNS THROUGH OUT JOB, 1ST TOP OUT PUMP 125SX, 15.8#, 3.82 YLD 4% CaCl2, 1/4 LB/SK FLOCELE ,NO RETURNS, WAIT 2 HRS ,PUMPED 2ND TOP OUT 100 SX 15.8, 3.82 YLD 4% CaCl2, 1/4 SX FLOCELE,NO RETURNS, WAIT 2 HRS ,PUMPED 3RD TOP OUT 225 SX 15.8, 3.82 YLD 4% CaCl2, 1/4 SX FLOCELE,NO RETURNS TO SURFACE, R/D CEMENTERS & RELEASE RIG @ 08:00 7/2/2011</p> <p>CONDUCTOR CASING: Cond. Depth set:40 Cement sx used:28</p> <p>SPUD DATE/TIME:6/30/2011 6:30</p> <p>SURFACE HOLE: Surface From depth:40 Surface To depth:2,450 Total SURFACE hours:27.50 Surface Casing size:8 5/8 # of casing joints ran:55 Casing set MD:2,413.0 # sx of cement:180/200/450 Cement blend (ppg:):11/15.8/15.8 Cement yield (ft3/sk):3.82/1.15/1.15 # of bbls to surface:0 Describe cement issues:3 TOP OUTS 125/100/225 CMT NO CEMENT TO SURFACE SKIDDED OVER Describe hole issues:NONE SKID THE RIG F/ THE NBU 921-35G1CS NU BOP AND FLOW LINE RU THE TESTER. TEST THE BOP, TIW, IBOP, DART VALVE, BOP VALVES, PIPE RAMS, BLIND RAMS, CHOKE VALVES AND KILL LINE TO 250#/5MIN AND 5000#/10 MIN. TESTED THE ANNULAR TO 2500#, TESTED THE SURFACE CASING TO 1500 PSI FOR 30 MIN. INSTALL THE WEAR BUSHING FINISH INSTALLING MUD AND FLOW LINE SLIP AND CUT 94' OF DRLG LINE PU AND SCRIBE THE BHA, TIH TAGGED CEMENT @ 2350' DRILLING CEMENT AND FLT EQUIP.</p>
	8:00 - 8:00	0.00	DRLSUR					
8/8/2011	4:00 - 5:00	1.00	MIRU	01	C	P		
	5:00 - 7:00	2.00	DRLPRO	14	A	P		
	7:00 - 11:00	4.00	DRLPRO	15	A	P		
	11:00 - 11:30	0.50	DRLPRO	15	A	P		
	11:30 - 12:00	0.50	DRLPRO	14	B	P		
	12:00 - 13:00	1.00	DRLPRO	01	B	P		
	13:00 - 13:30	0.50	DRLPRO	09	A	P		
	13:30 - 17:30	4.00	DRLPRO	06	A	P		
	17:30 - 19:30	2.00	DRLPRO	02	F	P		

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: PROPETRO 12/12, H&P 311/311
Event: DRILLING		Start Date: 6/11/2011	End Date: 8/14/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	19:30 - 23:30	4.00	DRLPRO	02	D	P		DRILLED 2471'-3119', 648'/ 3.5 HRS, 185.1'/HR . WOB/24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 1250/920. DIFF PRESS. 200-400# ON/OFF BOTTOM TORQUE 7/3K. PU/SO/ROT 112/90/99 CIRCULATING THE RESERVE PIT AND PUMP GEL SWEEPS. ROT 618'/3.25 HR 190.2'/HR SLID 30' .25 HR 120'/HR
	23:30 - 0:00	0.50	DRLPRO	07	A	P		RIG SERVICE
8/9/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 3119'-4058', 939'/ 6 HRS, 156.5'/HR . WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 1350/970. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 127/104/112 CIRCULATING THE RESERVE PIT AND PUMP GEL SWEEPS. ROT 907'/5.67 HR 160'/HR SLID 32' .33 HR 96.9'/HR
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILLED 4058'-5662',1604'/ 11.5 HRS,139.5'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 1475/1100. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 160/124/144 CIRCULATING THE RESERVE PIT AND PUMP GEL SWEEPS. ROT 1579'/11.1 HR 142.3'/HR SLID 25' .40 HR 62.5'/HR
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILLED 5662'-6505',843'/ 6 HRS,140.5'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 1630/1300. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 178/138/153 CIRCULATING THE RESERVE PIT AND PUMP GEL SWEEPS. ROT 824'/5.5 HR 149.8'/HR SLID 19' .5 HR 38'/HR

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011		Spud Date: 6/30/2011	
Project: UTAH-UINTAH			Site: NBU 921-35G PAD		Rig Name No: PROPETRO 12/12, H&P 311/311
Event: DRILLING			Start Date: 6/11/2011		End Date: 8/14/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)			UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/10/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 6505'-7076', 571' 6 HRS, 95.2'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 1700/1350. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 188/148/161 CIRCULATING THE RESERVE PIT AND PUMP GEL SWEEPS., STARTING A LIGHT MUD UP ROT 571' 6 HRS, 95.2'/HR SLID
	6:00 - 13:30	7.50	DRLPRO	02	D	P		DRILLED 7076'-7549', 473' 7.5 HRS, 63.1'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 1850/1575. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 190/145/169 34 VIS 10.2/MW LCM/5% LOST PARTIAL RETURNS @ 7530' 100 BBL. ROT 473' 7.5 HRS, 63.1'/HR SLID
	13:30 - 14:00	0.50	DRLPRO	07	A	P		RIG SERVICE
8/11/2011	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILLED 7549'-8020', 471' 10 HRS, 47.1'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESSURE 2180/1930. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 194/154/170 35/VIS 10.2/MW 8%/LCM ROT 451' 9 HRS, 50.1'/HR SLID 22' 1HR 22'/HR
	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 8020'-8334', 471' 6 HRS, 52.3'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESS. 2180/1930. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 194/154/170 37/VIS 10.2/MW 8%/LCM ROT 471' 10 HRS, 47.1'/HR SLID 0
	6:00 - 15:00	9.00	DRLPRO	02	D	P		DRILLED 8334'-8774', 440' 9 HRS, 48.8'/HR WOB/22-24K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESS. 2280/2010. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 8/6K. PU/SO/ROT 210/160/180 38/VIS 10.8/MW 5%/LCM ROT 440' 9 HRS, 48.8'/HR SLID 0
8/11/2011	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: PROPETRO 12/12, H&P 311/311
Event: DRILLING		Start Date: 6/11/2011	End Date: 8/14/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILLED 8774'-9110', 336'/ 8.5 HRS, 39.5'/HR WOB/23-25K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESS. 2420/2185. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 7/6K. PU/SO/ROT 210/166/183 38/VIS 11.5/MW 5%/LCM ROT 318'/ 6.5 HRS, 48.9'/HR SLID 18'/ 2HR, 9'/HR
8/12/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILLED 9110'-9308', 198'/ 6 HRS, 33'/HR WOB/23-25K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESS. 2460/2260. DIFF PRESS. 250-400# ON/OFF BOTTOM TORQUE 7/6K. PU/SO/ROT 215/168/185 38/VIS 11.6/MW 8%/LCM
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILLED 9308'-9717', 409'/11.5 HRS, 35.6'/HR WOB/23-25K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESS.2500/2350. DIFF PRESS. 250-300# ON/OFF BOTTOM TORQUE 7/6K. PU/SO/ROT 225/170/189 38/VIS 12.0/MW 8%/LCM
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	18:00 - 21:00	3.00	DRLPRO	02	C	P		DRILLED 9717'-9765, 48'/3 HRS, 16'/HR WOB/23-25K, MM/ 104 RPM, TD/60 RPM PUMP/110 SPM, 495 GPM, ON/OFF BOTTOM PUMP PRESS.2500/2350. DIFF PRESS. 250-300# ON/OFF BOTTOM TORQUE 7/6K. PU/SO/ROT 225/170/189 38/VIS 12.0/MW 8%/LCM
	21:00 - 22:00	1.00	DRLPRO	05	C	P		CIRCULATE BOTTOMS UP BEFORE THE WIPER TRIP
	22:00 - 22:30	0.50	DRLPRO	05	J	P		FLOW CHECK
	22:30 - 0:00	1.50	DRLPRO	06	E	P		WIPER TRIP TO THE CASING SHOE
8/13/2011	0:00 - 4:00	4.00	DRLPRO	06	E	P		FINISH THE WIPER TRIP TO THE SHOE.
	4:00 - 6:00	2.00	DRLPRO	05	C	P		CIRC/COND TO LDDP. 20' FLARE ON BOTTOMS UP.
	6:00 - 14:30	8.50	DRLPRO	06	A	P		LDDP/BHA #1 OUT OF THE HOLE AND 12 STANDS + THE STRAIGHT MOTOR ASSY. OUT OF THE DERRICK. PULLED THE WEAR BUSHING
	14:30 - 15:00	0.50	DRLPRO	14	B	P		
	15:00 - 16:00	1.00	CSG	12	A	P		HELD A PJSM W/ FRANK'S AND RU TO RUN CASING.
	16:00 - 23:30	7.50	CSG	12	C	P		RAN 5 JT. OF 4.5"/P-110/11.6#/BTC, 225 JTS OF 4.5"/I-80/11.6#/BTC CASING + 2 MARKERS FOR A TOTAL OF 232 JTS. LANDED @ 9754'. FC @ 9708', MARKERS TOPS @ 7440.6' & 4715.9'. 25'KB
	23:30 - 0:00	0.50	CSG	05	D	P		CIRCULATE BOTTOMS UP. 12' FLARE ON BOTTOMS UP
8/14/2011	0:00 - 0:30	0.50	CSG	05	D	P		CIRC CASING

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: PROPETRO 12/12, H&P 311/311
Event: DRILLING		Start Date: 6/11/2011	End Date: 8/14/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	0:30 - 3:00	2.50	CSG	12	E	P		PRESSURE TESTED LINES TO 4500 PSI. PUMPED 15 BBLs OF H2O SPACER AHEAD, 10 BBL OF 11# SCAVENGER CEMENT, PUMPED 187 BBLs (457 SX OF 12.0#, 2.3 CFT/SX, 12.7 GAL/SK) LEAD PREMIUM LIGHT CEMENT. PUMPED 247.3 BBLs (1060 SX OF 14.3#, 1.31 YD, 5.90 GAL/SK) POZ PREMIUM 50/50 TAIL CEMENT. SHUT DOWN AND WASHED LINES, DROP 4.5" TOP PLUG, PUMP 151 BBLs OF H2O TREATED WITH BIOCIDES AND CLAY INHIBITOR. BUMPED PLUG AT 2879 PSI, PRESSURED UP CSG TO 3266 PSI AND HELD FOR 5 MIN. CHECKED FLOATS, FLOATS HELD, FLOWED BACK 2 BBLs. EST TOC TAIL @ 3760', HAD 20 BBL. OF CEMENT BACK TO SURFACE. PLUG DOWN 8/14/2011 02:45
	3:00 - 4:00	1.00	CSG	14	A	P		ND THE BOP AND SET 100K ON C-22 SLIPS. CUT OFF
	4:00 - 6:00	2.00	RDMO	01	E	P		CLEAN PITS AND PREP THE RIG TO SKID TO HOME POSITION. RIG RELEASED 8/14/2011 06:00

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: PROPETRO 12/12, H&P 311/311
Event: DRILLING		Start Date: 6/11/2011	End Date: 8/14/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 6:00	0.00	RDMO					<p>CONDUCTOR CASING:40 Cond. Depth set:25 Cement sx used:</p> <p>SPUD DATE/TIME:6/30/2011 6:30</p> <p>SURFACE HOLE: Surface From depth:40 Surface To depth:2,471 Total SURFACE hours:23.50 Surface Casing size:8 5/8 # of casing joints ran:55 Casing set MD:2,441.0 # sx of cement:180 LEAD / 200 TAIL / 450 TOP OFF Cement blend (ppg):11# LEAD / 15.8# TAIL / 15.8# TOP OFF Cement yield (ft3/sk):3.82/1.15/1.15 # of bbls to surface: Describe cement issues:3 TOP OUTS NO FLUID TO SURFACE 20 BBL. LATER BROUGHT IT UP Describe hole issues:</p> <p>PRODUCTION: Rig Move/Skid start date/time:8/8/2011 4:00 Rig Move/Skid finish date/time:8/8/2011 5:00 Total MOVE hours:1.0 Prod Rig Spud date/time:8/8/2011 17:30 Rig Release date/time:8/14/2011 6:00 Total SPUD to RR hours:132.5 Planned depth MD9,759 Planned depth TVD9,746 Actual MD:9,775 Actual TVD:9,762 Open Wells \$ AFE \$: Open wells \$/ft:\$</p> <p>PRODUCTION HOLE: Prod. From depth:2,471 Prod. To depth:9,775 Total PROD hours: 94.5 Log Depth:N/A Production Casing size:4 1/2 # of casing joints ran:230 Casing set MD:9,754.0 # sx of cement:457 LEAD 1060 TAIL Cement blend (ppg):12 LEAD 14.3 TAIL Cement yield (ft3/sk):2.3 LEAD 1.31 TAIL Est. TOC (Lead & Tail) or 2 Stage :25' LEAD 3670' TAIL Describe cement issues: Describe hole issues:</p> <p>DIRECTIONAL INFO: KOP:25 Max angle:6.46</p>

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011		Spud Date: 6/30/2011				
Project: UTAH-UINTAH		Site: NBU 921-35G PAD		Rig Name No: PROPETRO 12/12, H&P 311/311				
Event: DRILLING		Start Date: 6/11/2011		End Date: 8/14/2011				
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								Departure:279.77 Max dogleg MD:2.24

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 921-35G4BS GREEN	Wellbore No.	OH
Well Name	NBU 921-35G4BS	Wellbore Name	NBU 921-35G4BS
Report No.	1	Report Date	9/15/2011
Project	UTAH-UINTAH	Site	NBU 921-35G PAD
Rig Name/No.		Event	COMPLETION
Start Date	9/15/2011	End Date	9/23/2011
Spud Date	6/30/2011	Active Datum	RKB @5,144.00usft (above Mean Sea Level)
UWI	SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0		

1.3 General

Contractor	CASED HOLE SOLUTIONS	Job Method	PERFORATE	Supervisor	ED GUDAC
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

Fluid Type		Fluid Density	
Surface Press		Estimate Res Press	
TVD Fluid Top		Fluid Head	
Hydrostatic Press		Press Difference	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	6,200.0 (usft)-9,522.0 (usft)	Start Date/Time	9/19/2011 12:00AM
No. of Intervals	43	End Date/Time	9/19/2011 12:00AM
Total Shots	240	Net Perforation Interval	61.00 (usft)
Avg Shot Density	3.93 (shot/ft)	Final Surface Pressure	
		Final Press Date	

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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
9/19/2011 12:00AM	WASATCH/			6,200.0	6,202.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N

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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
9/19/2011 12:00AM	WASATCH/			6,311.0	6,312.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			6,402.0	6,403.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			6,437.0	6,439.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			6,617.0	6,619.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			6,688.0	6,689.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			6,746.0	6,747.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			6,860.0	6,862.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			7,032.0	7,033.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			7,052.0	7,053.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			7,140.0	7,142.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			7,288.0	7,289.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			7,305.0	7,306.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	WASATCH/			7,418.0	7,420.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,651.0	7,653.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,672.0	7,674.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,729.0	7,730.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,764.0	7,765.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,790.0	7,791.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,836.0	7,837.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,871.0	7,872.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			7,938.0	7,939.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

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 /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
9/19/2011 12:00AM	MESAVERDE/			7,955.0	7,956.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,009.0	8,010.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,045.0	8,047.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,104.0	8,105.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,206.0	8,208.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,461.0	8,463.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,506.0	8,508.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,582.0	8,583.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,630.0	8,631.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,849.0	8,850.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			8,944.0	8,946.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,021.0	9,023.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,067.0	9,068.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,138.0	9,140.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,152.0	9,154.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,186.0	9,187.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,225.0	9,226.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,443.0	9,444.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,465.0	9,467.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,482.0	9,483.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
9/19/2011 12:00AM	MESAVERDE/			9,520.0	9,522.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 9/15/2011	End Date: 9/23/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/15/2011	7:00 - 12:00	5.00	COMP	33	C	P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 8 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 31 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 110 PSI. 2ND PSI TEST T/ 7000 PSI. HELD FOR 30 MIN. LOST 90 PSI. NO COMMUNICATION WITH SURFACE BLEED OFF PSI. MOVE T/ NEXT WELL. SWFW
9/16/2011	7:00 - 12:00	5.00	COMP	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH @ PERF AS PER PERF DESIGN. POOH. SWFW
9/19/2011	6:45 - 7:00	0.25	COMP	48		P		HSM, PINCH POINTS
	7:00 - 7:00	0.00	COMP	36	E	P		PERF & FRAC FOLLOWING WELL AS PER DESIGN W/ 30/50 MESH SAND & SLK WTR. ALL CBP'S ARE HALIBURTON 8K CBP'S. REFER TO STIM PJR FOR FLUID, SAND AND CHEMICAL VOLUME PUM'D
								FRAC STG #1] WHP=1,799#, BRK DN PERFS=3,688#, @=4.5 BPM, INJ RT=44.6, INJ PSI=5,625#, INITIAL ISIP=2,756#, INITIAL FG=73., FINAL ISIP=2,985#, FINAL FG=.75, AVERAGE RATE=49.1, AVERAGE PRESSURE=5,878#, MAX RATE=50.8, MAX PRESSURE=6,143#, NET PRESSURE INCREASE=229#, 20/24 83% CALC PERFS OPEN. X OVER TO WIRE LINE
								PERF STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,256', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW
								FRAC STG #2] WHP=1,873#, BRK DN PERFS=4,212#, @=4.6 BPM, INJ RT=36.3, INJ PSI=5,297#, INITIAL ISIP=3,132#, INITIAL FG=.78, FINAL ISIP=3,366#, FINAL FG=.81, AVERAGE RATE=45.1, AVERAGE PRESSURE=6,048#, MAX RATE=51.7, MAX PRESSURE=6,356#, NET PRESSURE INCREASE=234#, 18/24 77% CALC PERFS OPEN. X OVER TO WIRE LINE
								PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,098', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW SWFN.
9/20/2011	6:45 - 7:00	0.25	COMP	48		P		HSM, WORKING AROUND WIRELINE

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 9/15/2011	End Date: 9/23/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWM: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 17:00	10.00	COMP	36	E	P		<p>FRAC STG #3] WHP=2,200#, BRK DN PERFS=3,625#, @=4.5 BPM, INJ RT=41.4, INJ PSI=5,694#, INITIAL ISIP=2,954#, INITIAL FG=.77, FINAL ISIP=3,083#, FINAL FG=.78, AVERAGE RATE=50.3, AVERAGE PRESSURE=5,800#, MAX RATE=51.3, MAX PRESSURE=6,264#, NET PRESSURE INCREASE=129#, 18/24 75% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,661', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #4] WHP=1,680#, BRK DN PERFS=3,655#, @=4.7 BPM, INJ RT=39.3, INJ PSI=5,212#, INITIAL ISIP=2,387#, INITIAL FG=.72, FINAL ISIP=2,972#, FINAL FG=.79, AVERAGE RATE=49.8, AVERAGE PRESSURE=5,703#, MAX RATE=51.2, MAX PRESSURE=51.2#, NET PRESSURE INCREASE=585#, 16/24 67% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,238', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #5] WHP=1,310#, BRK DN PERFS=2,308#, @=3.6 BPM, INJ RT=50.7, INJ PSI=4,954#, INITIAL ISIP=1,753#, INITIAL FG=.65, FINAL ISIP=2,390#, FINAL FG=.73, AVERAGE RATE=50.6, AVERAGE PRESSURE=4,907#, MAX RATE=51.2, MAX PRESSURE=5,661#, NET PRESSURE INCREASE=637#, 21/24 86% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,986', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW SWMFn.</p>
9/21/2011	6:15 - 6:30	0.25	COMP	48		P		HSM, OVER HEAD LOADS

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UJINTAH		Site: NBU 921-35G PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 9/15/2011	End Date: 9/23/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:30 - 17:30	11.00	COMP	36	E	P		<p>FRAC STG #6] WHP=1,407#, BRK DN PERFS=2,350#, @=4.4 BPM, INJ RT=50.5, INJ PSI=4,669#, INITIAL ISIP=1,807#, INITIAL FG=.67, FINAL ISIP=2,316#, FINAL FG=.73, AVERAGE RATE=50.4, AVERAGE PRESSURE=4,476#, MAX RATE=52.1, MAX PRESSURE=5,815#, NET PRESSURE INCREASE=509#, 22/24 94% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,704', PERF MESAVERDE / WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, WIRELINE STACKED OUT @=58XX' POOH REFLUSHED WELL] X OVER TO FRAC CREW</p> <p>FRAC STG #7] WHP=1,978#, BRK DN PERFS=2,228#, @=5.6 BPM, INJ RT=49.4, INJ PSI=5,010#, INITIAL ISIP=1,990#, INITIAL FG=.70, FINAL ISIP=2,333#, FINAL FG=.75, AVERAGE RATE=49.3, AVERAGE PRESSURE=4,928#, MAX RATE=50.3, MAX PRESSURE=6,034#, NET PRESSURE INCREASE=343#, 20/24 85% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,336', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #8] WHP=1,036#, BRK DN PERFS=2,801#, @=4.2 BPM, INJ RT=44.1, INJ PSI=5,006#, INITIAL ISIP=1,767#, INITIAL FG=.69, FINAL ISIP=2,043#, FINAL FG=.72, AVERAGE RATE=49.2, AVERAGE PRESSURE=4,945#, MAX RATE=50.1, MAX PRESSURE=6,018#, NET PRESSURE INCREASE=276#, 16/24 68% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #9] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6,892', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #9] WHP=439#, BRK DN PERFS=2,812#, @=4.5 BPM, INJ RT=49.5, INJ PSI=4,775#, INITIAL ISIP=1,930#, INITIAL FG=.73, FINAL ISIP=1,885#, FINAL FG=.72, AVERAGE RATE=49.3, AVERAGE PRESSURE=4,003#, MAX RATE=50.5, MAX PRESSURE=4,911#, NET PRESSURE INCREASE=-25#, 21/24 86% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>PERF STG #10] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6,469', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011		Spud Date: 6/30/2011	
Project: UTAH-UINTAH		Site: NBU 921-35G PAD		Rig Name No: GWS 1/1	
Event: COMPLETION		Start Date: 9/15/2011		End Date: 9/23/2011	
Active Datum: RKB @5,144.00usft (above Mean Sea Level)			UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/22/2011	6:30 - 6:45	0.25	COMP	48		P		<p>PERSAY IN PROCEDURE, X OVER TO FRAC CREW. SVMFN HSM, R/D</p> <p>FRAC STG #9] WHP=722#, BRK DN PERFS=1,872#, @=4.6 BPM, INJ RT=49.1, INJ PSI=4,546#, INITIAL ISIP=1,615#, INITIAL FG=.69, FINAL ISIP=1,420#, FINAL FG=.66, AVERAGE RATE=49.4, AVERAGE PRESSURE=4,741#, MAX RATE=49.6, MAX PRESSURE=5,571#, NET PRESSURE INCREASE=-195#, 20/24 82% CALC PERFS OPEN. X OVER TO WIRE LINE</p> <p>P/U RIH W/ HALIBURTON 8K CBP, SET FOR TOP KILL @=6,150'</p> <p>TOTAL FLUID PUMP'D=13,360 BBLs TOTAL SAND PUMP'D=289,871# HSM, SLIPS, TRIPS & FALLS, RABBITING TBG</p> <p>MIRU, SPOT EQUIP, ND WH, NU BOP, RU FLOOR & TBG EQUIP, RU HAL 9000 & FLOWLINE TO PIT, SPOT TBG TRAILER, PU TBG, REMOVE THREAD PROTECTORS, TALLY & DRIFT TBG TAG @ 6,115', RU P/S, FILL TBG, BREAK CIRC, PRESS TEST BOP TO 3,000 PSIFOR 15 MIN, LOST 0 PSI, SURFACE CSG VALVE OPEN & LOCKED, START DRLG PLUGS.</p> <p>C/O 25' SAND, TAG 1ST PLUG @ 6,141' DRL PLUG IN 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 25 PSI. APPROX G/LR: 5% / 95%.</p> <p>C/O 30' SAND, TAG 2ND PLUG @ 6,469' DRL PLUG IN 9 MIN. 400 PSI INCREASE RIH, CSG PRESS 100 PSI. APPROX G/LR: 5% / 95%.</p> <p>C/O 30' SAND, TAG 3RD PLUG @ 6,892' DRL PLUG IN 8 MIN. 300 PSI INCREASE RIH, CSG PRESS 0 PSI. APPROX G/LR: 5% / 95%.</p> <p>C/O 30' SAND, TAG 4TH PLUG @ 7,336' DRL PLUG IN 8 MIN. 400 PSI INCREASE RIH, CSG PRESS 75 PSI. APPROX G/LR: 10% / 90%.</p> <p>LET WELL CLEAN UP FOR 20 MIN, D/O REMAINING PLUGS IN AM, EOT @ 7,600', SWI, SDFN. HSM, SLIPS, TRIPS & FALLS, ROTARY</p>
	6:45 - 6:45	0.00	COMP	36	E	P		
9/26/2011	7:00 - 7:15	0.25	COMP	48		P		<p>C/O 30' SAND, TAG 4TH PLUG @ 7,336' DRL PLUG IN 8 MIN. 400 PSI INCREASE RIH, CSG PRESS 75 PSI. APPROX G/LR: 10% / 90%.</p> <p>LET WELL CLEAN UP FOR 20 MIN, D/O REMAINING PLUGS IN AM, EOT @ 7,600', SWI, SDFN. HSM, SLIPS, TRIPS & FALLS, ROTARY</p>
	7:15 - 17:00	9.75	COMP	31	I	P		
9/27/2011	7:00 - 7:15	0.25	COMP	48		P		<p>LET WELL CLEAN UP FOR 20 MIN, D/O REMAINING PLUGS IN AM, EOT @ 7,600', SWI, SDFN. HSM, SLIPS, TRIPS & FALLS, ROTARY</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 9/15/2011	End Date: 9/23/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

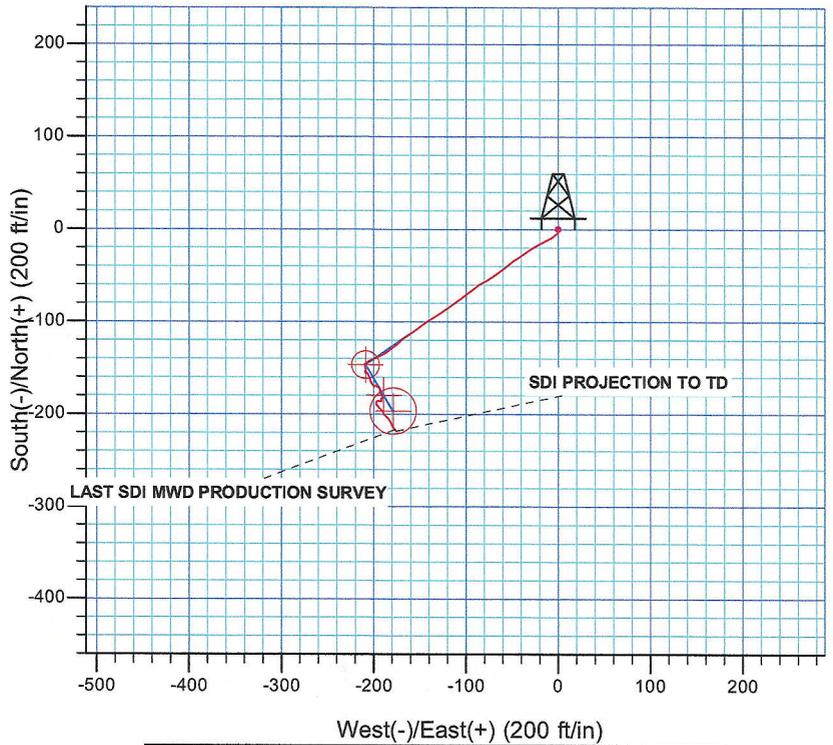
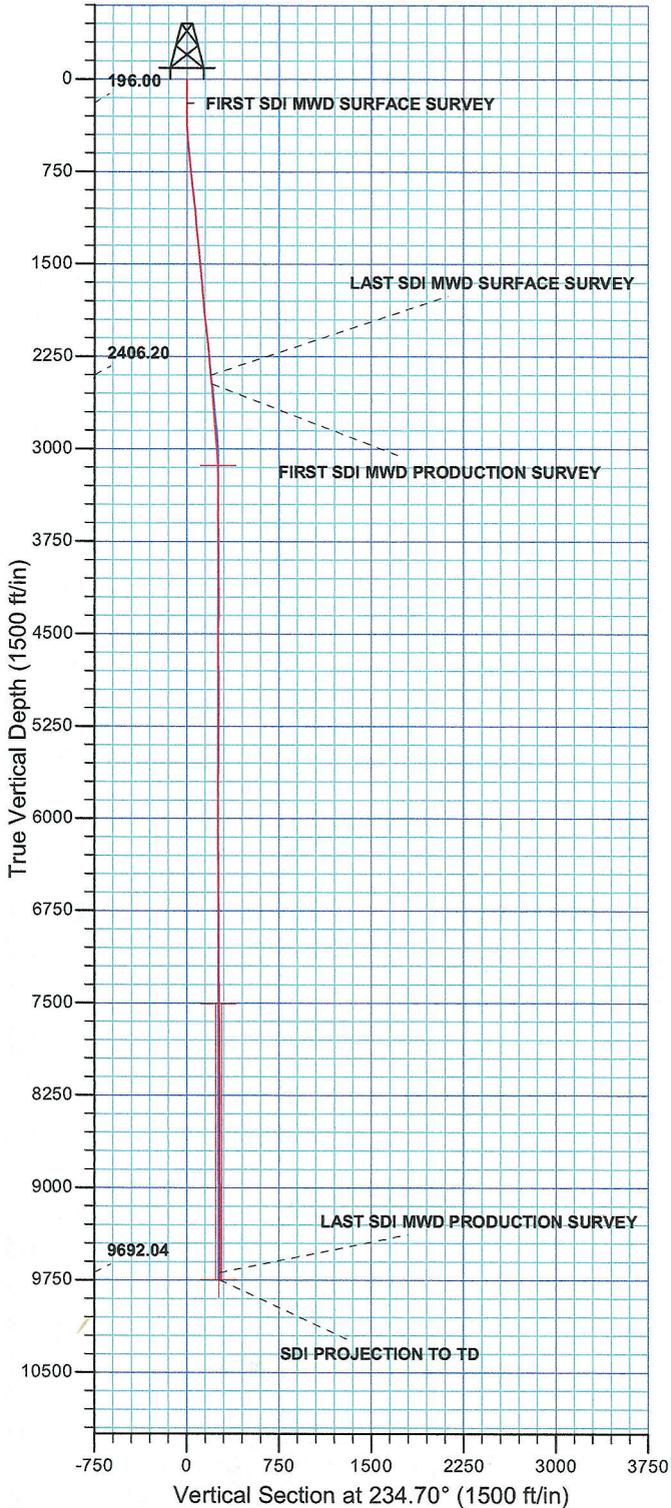
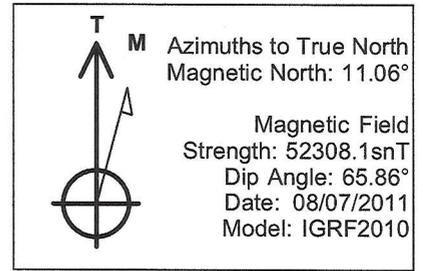
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 17:00	9.75	COMP	44	C	P		<p>SICP 1,000 PSI, OPEN WELL BLEED OFF PRESS, STRAIGHT WATER, OPEN RAMS, FINISH D/O REMAINING 6 PLUGS, SURFACE CSG VALVE OPEN & LOCKED.</p> <p>AFTER WELL LEVELED OUT BEFORE DRLG 5TH PLUG, APPROX G/LR: 5% / 95%, CSG PRESS 150 PSI.</p> <p>C/O 25' SAND, TAG 5TH PLUG @ 7,704' DRL PLUG IN 9 MIN. 300 PSI INCREASE RIH, CSG PRESS 200 PSI. APPROX G/LR: 5% / 95%.</p> <p>C/O 25' SAND, TAG 6TH PLUG @ 7,986' DRL PLUG IN 10 MIN. 200 PSI INCREASE RIH, CSG PRESS 0 PSI. APPROX G/LR: 5% / 95%.</p> <p>C/O 15' SAND, TAG 7TH PLUG @ 8,238' DRL PLUG IN 9 MIN. 300 PSI INCREASE RIH, CSG PRESS 200 PSI. APPROX G/LR: 10% / 90%.</p> <p>C/O 25' SAND, TAG 8TH PLUG @ 8,664' DRL PLUG IN 8 MIN. 300 PSI INCREASE RIH, CSG PRESS 200 PSI. APPROX G/LR: 25% / 75%.</p> <p>C/O 25' SAND, TAG 9TH PLUG @ 9,098' DRL PLUG IN 9 MIN. 400 PSI INCREASE RIH, CSG PRESS 300 PSI. APPROX G/LR: 30% / 70%.</p> <p>C/O 30' SAND, TAG 10TH PLUG @ 9,256' DRL PLUG IN 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 400 PSI. APPROX G/LR: 40% / 60%.</p> <p>PBD @ 9,708', BTM PERF @ 9,522', RIH TAG @ 9,635', P/U POWER SWIVEL, C/O FROM 9,635' TO 9,665', 143' PAST BTM PERF W/ 304 JTS 2 3/8" L-80 TBG, LD 18 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 286 JTS 2 3/8" L-80, EOT 9,093.42'.</p> <p>RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF BIT W/ 3,200 PSI, LET BIT FALL FOR 20 MIN.</p> <p>TURN OVER TO FLOW BACK CREW, RD & MOVETO NEXT WELL ON PAD.</p> <p>KB= 25' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 315 JTS 286 JTS 2 3/8" L-80 = 9,065.39' TBG USED 286 JTS POBS= 2.20' TBG RETURNED 29 JTS EOT @ 9,093.42' (2 JT W/ BAD THREADS 27 GOOD)</p> <p>TWTR= 13,360 BBLs</p>

US ROCKIES REGION
Operation Summary Report

Well: NBU 921-35G4BS GREEN		Spud Conductor: 6/16/2011	Spud Date: 6/30/2011
Project: UTAH-UINTAH		Site: NBU 921-35G PAD	Rig Name No: GWS 1/1
Event: COMPLETION		Start Date: 9/15/2011	End Date: 9/23/2011
Active Datum: RKB @5,144.00usft (above Mean Sea Level)		UWI: SW/NE/0/9/S/21/E/35/0/0/26/PM/N/2053/E/0/1643/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	14:00 - 14:00	0.00	PROD	50				TWR= 3,000 BBLs TWLTR= 10,360 BBLs WELL TURNED TO SALES @ 1400 HR ON 9/27/11 - 950 MCFD, 1920 BWPD, CP 1500#, FTP 800#, CK 20/64"
9/28/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 1700#, TP 1600#, 20/64" CK, 41 BWPH, - SAND, - GAS TTL BBLs RECOVERED: 28.86% BBLs LEFT TO RECOVER: 71.14%
10/6/2011	7:00 -			50				WELL IP'D ON 10/6/11 - 1839 MCFD, 0 BOPD, 550 BWPD, CP 2074#, FTP 1362#, CK 20/64", LP 95#, 24 HRS

WELL DETAILS: NBU 921-35G4BS					
GL 5119° & KB 25° @ 5144.00ft (HP 311)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14527384.13	2056444.92	39° 59' 38.976 N	109° 30' 52.740 W



PROJECT DETAILS: Uintah County, UT UTM12	
Geodetic System:	Universal Transverse Mercator (US Survey Feet)
Datum:	NAD 1927 - Western US
Ellipsoid:	Clarke 1866
Zone:	Zone 12N (114 W to 108 W)
Location:	SEC 35 T9S R21E
System Datum:	Mean Sea Level



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-35G Pad
NBU 921-35G4BS**

OH

Design: OH

Standard Survey Report

06 September, 2011

Anadarko 
Petroleum Corporation



SDI
Survey Report



Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 921-35G Pad, SEC 35 T9S R21E				
Site Position:		Northing:	14,527,383.91 usft	Latitude:	39° 59' 38.969 N
From:	Lat/Long	Easting:	2,056,474.61 usft	Longitude:	109° 30' 52.358 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35G4BS, 2053' FNL 1643' FEL				
Well Position	+N/-S	0.00 ft	Northing:	14,527,384.13 usft	Latitude: 39° 59' 38.976 N
	+E/-W	0.00 ft	Easting:	2,056,444.92 usft	Longitude: 109° 30' 52.740 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level: 5,119.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/07/11	11.06	65.86	52,308

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	234.70	

Survey Program	Date	09/06/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
196.00	2,416.00	Survey #1 SDI MWD SURFACE (OH)	MWD SDI	MWD - Standard ver 1.0.1	
2,485.00	9,765.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1	

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	
196.00	0.62	115.14	196.00	-0.45	0.96	-0.52	0.32	0.32	0.00	
FIRST SDI MWD SURFACE SURVEY										
283.00	0.70	191.34	282.99	-1.17	1.28	-0.37	0.94	0.09	87.59	
367.00	1.85	219.91	366.97	-2.71	0.31	1.32	1.52	1.37	34.01	
457.00	3.87	227.91	456.85	-5.87	-2.88	5.74	2.28	2.24	8.89	
547.00	5.34	240.08	546.56	-9.99	-8.76	12.92	1.95	1.63	13.52	
637.00	5.77	242.71	636.14	-14.15	-16.41	21.57	0.56	0.48	2.92	
727.00	6.09	238.24	725.66	-18.74	-24.49	30.82	0.62	0.36	-4.97	
817.00	6.21	237.13	815.14	-23.90	-32.64	40.44	0.19	0.13	-1.23	

Company: Kerr McGee Oil and Gas Onshore LP
 Project: Uintah County, UT UTM12
 Site: NBU 921-35G Pad
 Well: NBU 921-35G4BS
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
 TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
 MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
907.00	6.46	237.43	904.59	-29.26	-40.99	50.37	0.28	0.28	0.33
997.00	5.83	233.16	994.07	-34.73	-48.92	59.99	0.86	-0.70	-4.74
1,087.00	6.17	227.71	1,083.58	-40.72	-56.15	69.36	0.74	0.38	-6.06
1,177.00	5.69	234.51	1,173.10	-46.57	-63.36	78.62	0.94	-0.53	7.56
1,267.00	5.43	238.02	1,262.68	-51.41	-70.61	87.34	0.48	-0.29	3.90
1,357.00	5.67	240.35	1,352.26	-55.87	-78.09	96.01	0.37	0.27	2.59
1,447.00	5.29	234.96	1,441.85	-60.45	-85.35	104.59	0.71	-0.42	-5.99
1,537.00	5.51	234.60	1,531.45	-65.34	-92.26	113.06	0.25	0.24	-0.40
1,627.00	5.28	229.03	1,621.05	-70.55	-98.91	121.50	0.64	-0.26	-6.19
1,717.00	5.00	233.64	1,710.69	-75.59	-105.20	129.54	0.55	-0.31	5.12
1,807.00	5.42	234.29	1,800.31	-80.40	-111.81	137.71	0.47	0.47	0.72
1,987.00	6.11	236.80	1,979.40	-90.61	-126.73	155.79	0.41	0.38	1.39
2,077.00	6.06	239.29	2,068.90	-95.66	-134.82	165.31	0.30	-0.06	2.77
2,167.00	5.93	236.46	2,158.40	-100.65	-142.78	174.69	0.36	-0.14	-3.14
2,347.00	5.44	230.13	2,337.52	-111.26	-157.08	192.49	0.44	-0.27	-3.52
2,416.00	5.68	237.77	2,406.20	-115.18	-162.48	199.16	1.13	0.35	11.07
LAST SDI MWD SURFACE SURVEY									
2,485.00	5.10	234.13	2,474.89	-118.79	-167.85	205.64	0.98	-0.84	-5.28
FIRST SDI MWD PRODUCTION SURVEY									
2,579.00	5.10	229.47	2,568.52	-123.96	-174.41	213.97	0.44	0.00	-4.96
2,674.00	4.48	228.33	2,663.19	-129.17	-180.39	221.87	0.66	-0.65	-1.20
2,768.00	4.66	240.72	2,756.89	-133.48	-186.47	229.31	1.07	0.19	13.18
2,862.00	4.13	236.59	2,850.61	-137.21	-192.62	236.49	0.66	-0.56	-4.39
2,957.00	4.31	252.23	2,945.36	-140.18	-198.88	243.32	1.22	0.19	16.46
3,051.00	3.43	233.86	3,039.15	-142.92	-204.51	249.50	1.61	-0.94	-19.54
3,146.00	2.11	237.47	3,134.03	-145.53	-208.28	254.08	1.40	-1.39	3.80
3,240.00	0.00	128.22	3,228.01	-146.47	-209.74	255.81	2.24	-2.24	0.00
3,334.00	0.26	173.66	3,322.01	-146.68	-209.72	255.92	0.28	0.28	0.00
3,429.00	0.23	175.26	3,417.01	-147.08	-209.68	256.12	0.03	-0.03	1.68
3,523.00	0.53	177.35	3,511.01	-147.70	-209.64	256.45	0.32	0.32	2.22
3,617.00	0.79	166.54	3,605.00	-148.77	-209.47	256.92	0.31	0.28	-11.50
3,712.00	0.99	173.14	3,699.99	-150.22	-209.22	257.56	0.24	0.21	6.95
3,806.00	1.32	169.27	3,793.97	-152.09	-208.92	258.40	0.36	0.35	-4.12
3,900.00	0.35	272.36	3,887.96	-153.14	-209.01	259.07	1.53	-1.03	109.67
3,994.00	0.53	179.81	3,981.96	-153.57	-209.29	259.55	0.69	0.19	-98.46
4,088.00	0.88	164.61	4,075.96	-154.70	-209.10	260.05	0.42	0.37	-16.17
4,183.00	0.97	149.40	4,170.94	-156.09	-208.50	260.36	0.27	0.09	-16.01
4,277.00	0.62	340.12	4,264.94	-156.30	-208.26	260.29	1.68	-0.37	-180.09
4,371.00	0.44	7.55	4,358.94	-155.46	-208.39	259.91	0.33	-0.19	29.18
4,466.00	0.26	95.52	4,453.93	-155.12	-208.13	259.50	0.53	-0.19	92.60
4,560.00	0.26	109.59	4,547.93	-155.21	-207.71	259.22	0.07	0.00	14.97
4,655.00	0.95	145.72	4,642.93	-155.94	-207.07	259.11	0.80	0.73	38.03
4,749.00	0.97	148.96	4,736.91	-157.26	-206.22	259.18	0.06	0.02	3.45

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,843.00	1.06	162.85	4,830.90	-158.77	-205.55	259.51	0.28	0.10	14.78
4,938.00	1.23	161.35	4,925.88	-160.58	-204.97	260.07	0.18	0.18	-1.58
5,032.00	1.49	153.71	5,019.85	-162.63	-204.10	260.55	0.34	0.28	-8.13
5,126.00	1.41	158.98	5,113.82	-164.81	-203.15	261.03	0.17	-0.09	5.61
5,221.00	1.41	148.35	5,208.80	-166.89	-202.11	261.39	0.27	0.00	-11.19
5,315.00	1.67	148.35	5,302.76	-169.04	-200.79	261.56	0.28	0.28	0.00
5,409.00	0.26	8.60	5,396.75	-170.00	-200.04	261.50	2.00	-1.50	-148.67
5,504.00	0.26	92.54	5,491.75	-169.80	-199.79	261.18	0.37	0.00	88.36
5,598.00	0.35	57.20	5,585.75	-169.65	-199.34	260.72	0.22	0.10	-37.60
5,692.00	0.75	95.04	5,679.74	-169.55	-198.48	259.96	0.55	0.43	40.26
5,787.00	0.53	109.32	5,774.74	-169.75	-197.45	259.24	0.28	-0.23	15.03
5,881.00	0.70	118.02	5,868.73	-170.16	-196.53	258.73	0.21	0.18	9.26
5,975.00	0.79	106.60	5,962.72	-170.62	-195.40	258.07	0.18	0.10	-12.15
6,070.00	0.97	123.21	6,057.71	-171.24	-194.10	257.37	0.33	0.19	17.48
6,164.00	0.97	180.34	6,151.70	-172.48	-193.44	257.54	0.99	0.00	60.78
6,258.00	1.32	183.94	6,245.68	-174.35	-193.52	258.69	0.38	0.37	3.83
6,353.00	0.26	188.34	6,340.67	-175.66	-193.63	259.53	1.12	-1.12	4.63
6,447.00	0.62	161.18	6,434.67	-176.35	-193.49	259.82	0.43	0.38	-28.89
6,542.00	0.62	138.68	6,529.66	-177.22	-192.99	259.92	0.25	0.00	-23.68
6,636.00	0.88	143.95	6,623.66	-178.19	-192.23	259.85	0.29	0.28	5.61
6,730.00	0.26	131.65	6,717.65	-178.91	-191.64	259.80	0.67	-0.66	-13.09
6,825.00	0.47	150.70	6,812.65	-179.39	-191.29	259.79	0.25	0.22	20.05
6,919.00	0.79	149.75	6,906.64	-180.29	-190.78	259.88	0.34	0.34	-1.01
7,013.00	0.97	164.43	7,000.63	-181.62	-190.24	260.21	0.31	0.19	15.62
7,108.00	0.44	239.93	7,095.63	-182.57	-190.34	260.85	1.01	-0.56	79.47
7,202.00	0.44	223.58	7,189.62	-183.02	-190.90	261.56	0.13	0.00	-17.39
7,296.00	0.53	233.78	7,283.62	-183.54	-191.50	262.35	0.13	0.10	10.85
7,390.00	0.53	194.23	7,377.62	-184.21	-191.96	263.11	0.38	0.00	-42.07
7,485.00	0.53	161.71	7,472.61	-185.06	-191.93	263.58	0.31	0.00	-34.23
7,579.00	0.62	152.83	7,566.61	-185.92	-191.56	263.78	0.13	0.10	-9.45
7,674.00	1.14	264.01	7,661.60	-186.48	-192.26	264.67	1.56	0.55	117.03
7,768.00	0.79	279.13	7,755.59	-186.47	-193.83	265.95	0.46	-0.37	16.09
7,862.00	0.53	301.80	7,849.58	-186.14	-194.84	266.58	0.39	-0.28	24.12
7,957.00	0.44	262.87	7,944.58	-185.95	-195.58	267.07	0.35	-0.09	-40.98
8,051.00	0.35	244.68	8,038.58	-186.12	-196.19	267.68	0.16	-0.10	-19.35
8,145.00	0.70	214.12	8,132.57	-186.72	-196.78	268.50	0.46	-0.37	-32.51
8,240.00	0.62	185.44	8,227.57	-187.71	-197.15	269.37	0.35	-0.08	-30.19
8,334.00	0.53	157.93	8,321.56	-188.62	-197.03	269.81	0.31	-0.10	-29.27
8,428.00	0.53	167.07	8,415.56	-189.45	-196.77	270.07	0.09	0.00	9.72
8,523.00	0.62	140.27	8,510.55	-190.27	-196.35	270.20	0.30	0.09	-28.21
8,617.00	0.62	160.30	8,604.55	-191.14	-195.85	270.30	0.23	0.00	21.31
8,711.00	1.06	133.05	8,698.54	-192.21	-195.04	270.26	0.62	0.47	-28.99
8,805.00	1.41	145.71	8,792.52	-193.76	-193.76	270.10	0.47	0.37	13.47
8,900.00	1.41	138.15	8,887.49	-195.60	-192.32	269.99	0.20	0.00	-7.96

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

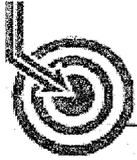
Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,994.00	1.93	135.16	8,981.45	-197.58	-190.43	269.60	0.56	0.55	-3.18
9,088.00	1.67	144.66	9,075.40	-199.82	-188.52	269.33	0.42	-0.28	10.11
9,182.00	1.85	133.85	9,169.36	-201.99	-186.64	269.05	0.40	0.19	-11.50
9,277.00	1.76	140.79	9,264.31	-204.18	-184.61	268.66	0.25	-0.09	7.31
9,371.00	1.85	154.76	9,358.26	-206.67	-183.05	268.83	0.48	0.10	14.86
9,465.00	2.02	148.08	9,452.21	-209.45	-181.53	269.19	0.30	0.18	-7.11
9,559.00	2.02	151.86	9,546.15	-212.32	-179.87	269.49	0.14	0.00	4.02
9,654.00	2.37	143.03	9,641.08	-215.37	-177.90	269.64	0.51	0.37	-9.29
9,705.00	2.37	144.74	9,692.04	-217.07	-176.65	269.61	0.14	0.00	3.35
LAST SDI MWD PRODUCTION SURVEY									
9,765.00	2.37	144.74	9,751.99	-219.10	-175.22	269.62	0.00	0.00	0.00
SDI PROJECTION TO TD									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
196.00	196.00	-0.45	0.96	FIRST SDI MWD SURFACE SURVEY
2,416.00	2,406.20	-115.18	-162.48	LAST SDI MWD SURFACE SURVEY
2,485.00	2,474.89	-118.79	-167.85	FIRST SDI MWD PRODUCTION SURVEY
9,705.00	9,692.04	-217.07	-176.65	LAST SDI MWD PRODUCTION SURVEY
9,765.00	9,751.99	-219.10	-175.22	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 921-35G Pad
NBU 921-35G4BS**

OH

Design: OH

Survey Report - Geographic

06 September, 2011

Anadarko 
Petroleum Corporation

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 921-35G Pad, SEC 35 T9S R21E				
Site Position:		Northing:	14,527,383.91 usft	Latitude:	39° 59' 38.969 N
From:	Lat/Long	Easting:	2,056,474.61 usft	Longitude:	109° 30' 52.358 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.95 °

Well	NBU 921-35G4BS, 2053' FNL 1643' FEL				
Well Position	+N/-S	0.00 ft	Northing:	14,527,384.13 usft	Latitude: 39° 59' 38.976 N
	+E/-W	0.00 ft	Easting:	2,056,444.92 usft	Longitude: 109° 30' 52.740 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level: 5,119.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/07/11	11.06	65.86	52,308

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	234.70	

Survey Program	Date	09/06/11			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
196.00	2,416.00	Survey #1 SDI MWD SURFACE (OH)	MWD SDI	MWD - Standard ver 1.0.1	
2,485.00	9,765.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,527,384.13	2,056,444.92	39° 59' 38.976 N	109° 30' 52.740 W
196.00	0.62	115.14	196.00	-0.45	0.96	14,527,383.70	2,056,445.88	39° 59' 38.971 N	109° 30' 52.728 W
FIRST SDI MWD SURFACE SURVEY									
283.00	0.70	191.34	282.99	-1.17	1.28	14,527,382.98	2,056,446.22	39° 59' 38.964 N	109° 30' 52.723 W
367.00	1.85	219.91	366.97	-2.71	0.31	14,527,381.43	2,056,445.27	39° 59' 38.949 N	109° 30' 52.736 W
457.00	3.87	227.91	456.85	-5.87	-2.88	14,527,378.22	2,056,442.14	39° 59' 38.918 N	109° 30' 52.777 W
547.00	5.34	240.08	546.56	-9.99	-8.76	14,527,374.00	2,056,436.32	39° 59' 38.877 N	109° 30' 52.852 W
637.00	5.77	242.71	636.14	-14.15	-16.41	14,527,369.71	2,056,428.74	39° 59' 38.836 N	109° 30' 52.951 W
727.00	6.09	238.24	725.66	-18.74	-24.49	14,527,364.99	2,056,420.74	39° 59' 38.791 N	109° 30' 53.055 W
817.00	6.21	237.13	815.14	-23.90	-32.64	14,527,359.70	2,056,412.68	39° 59' 38.740 N	109° 30' 53.159 W
907.00	6.46	237.43	904.59	-29.26	-40.99	14,527,354.19	2,056,404.42	39° 59' 38.687 N	109° 30' 53.267 W

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
997.00	5.83	233.16	994.07	-34.73	-48.92	14,527,348.59	2,056,396.58	39° 59' 38.633 N	109° 30' 53.368 W
1,087.00	6.17	227.71	1,083.58	-40.72	-56.15	14,527,342.48	2,056,389.45	39° 59' 38.573 N	109° 30' 53.461 W
1,177.00	5.69	234.51	1,173.10	-46.57	-63.36	14,527,336.52	2,056,382.34	39° 59' 38.516 N	109° 30' 53.554 W
1,267.00	5.43	238.02	1,262.68	-51.41	-70.61	14,527,331.55	2,056,375.17	39° 59' 38.468 N	109° 30' 53.647 W
1,357.00	5.67	240.35	1,352.26	-55.87	-78.09	14,527,326.97	2,056,367.77	39° 59' 38.424 N	109° 30' 53.743 W
1,447.00	5.29	234.96	1,441.85	-60.45	-85.35	14,527,322.27	2,056,360.59	39° 59' 38.378 N	109° 30' 53.837 W
1,537.00	5.51	234.60	1,531.45	-65.34	-92.26	14,527,317.27	2,056,353.75	39° 59' 38.330 N	109° 30' 53.926 W
1,627.00	5.28	229.03	1,621.05	-70.55	-98.91	14,527,311.94	2,056,347.19	39° 59' 38.278 N	109° 30' 54.011 W
1,717.00	5.00	233.64	1,710.69	-75.59	-105.20	14,527,306.80	2,056,340.99	39° 59' 38.229 N	109° 30' 54.092 W
1,807.00	5.42	234.29	1,800.31	-80.40	-111.81	14,527,301.88	2,056,334.46	39° 59' 38.181 N	109° 30' 54.177 W
1,987.00	6.11	236.80	1,979.40	-90.61	-126.73	14,527,291.43	2,056,319.72	39° 59' 38.080 N	109° 30' 54.368 W
2,077.00	6.06	239.29	2,068.90	-95.66	-134.82	14,527,286.24	2,056,311.71	39° 59' 38.030 N	109° 30' 54.472 W
2,167.00	5.93	236.46	2,158.40	-100.65	-142.78	14,527,281.12	2,056,303.83	39° 59' 37.981 N	109° 30' 54.575 W
2,347.00	5.44	230.13	2,337.52	-111.26	-157.08	14,527,270.27	2,056,289.71	39° 59' 37.876 N	109° 30' 54.758 W
2,416.00	5.68	237.77	2,406.20	-115.18	-162.48	14,527,266.27	2,056,284.38	39° 59' 37.837 N	109° 30' 54.828 W
LAST SDI MWD SURFACE SURVEY									
2,485.00	5.10	234.13	2,474.89	-118.79	-167.85	14,527,262.56	2,056,279.07	39° 59' 37.802 N	109° 30' 54.897 W
FIRST SDI MWD PRODUCTION SURVEY									
2,579.00	5.10	229.47	2,568.52	-123.96	-174.41	14,527,257.29	2,056,272.59	39° 59' 37.751 N	109° 30' 54.981 W
2,674.00	4.48	228.33	2,663.19	-129.17	-180.39	14,527,251.98	2,056,266.70	39° 59' 37.699 N	109° 30' 55.058 W
2,768.00	4.66	240.72	2,756.89	-133.48	-186.47	14,527,247.57	2,056,260.70	39° 59' 37.657 N	109° 30' 55.136 W
2,862.00	4.13	236.59	2,850.61	-137.21	-192.62	14,527,243.74	2,056,254.61	39° 59' 37.620 N	109° 30' 55.215 W
2,957.00	4.31	252.23	2,945.36	-140.18	-198.88	14,527,240.66	2,056,248.40	39° 59' 37.590 N	109° 30' 55.296 W
3,051.00	3.43	233.86	3,039.15	-142.92	-204.51	14,527,237.83	2,056,242.81	39° 59' 37.563 N	109° 30' 55.368 W
3,146.00	2.11	237.47	3,134.03	-145.53	-208.28	14,527,235.15	2,056,239.09	39° 59' 37.537 N	109° 30' 55.416 W
3,240.00	0.00	128.22	3,228.01	-146.47	-209.74	14,527,234.19	2,056,237.65	39° 59' 37.528 N	109° 30' 55.435 W
3,334.00	0.26	173.66	3,322.01	-146.68	-209.72	14,527,233.98	2,056,237.67	39° 59' 37.526 N	109° 30' 55.435 W
3,429.00	0.23	175.26	3,417.01	-147.08	-209.68	14,527,233.58	2,056,237.72	39° 59' 37.522 N	109° 30' 55.434 W
3,523.00	0.53	177.35	3,511.01	-147.70	-209.64	14,527,232.96	2,056,237.77	39° 59' 37.516 N	109° 30' 55.434 W
3,617.00	0.79	166.54	3,605.00	-148.77	-209.47	14,527,231.90	2,056,237.95	39° 59' 37.505 N	109° 30' 55.432 W
3,712.00	0.99	173.14	3,699.99	-150.22	-209.22	14,527,230.45	2,056,238.23	39° 59' 37.491 N	109° 30' 55.428 W
3,806.00	1.32	169.27	3,793.97	-152.09	-208.92	14,527,228.58	2,056,238.56	39° 59' 37.473 N	109° 30' 55.425 W
3,900.00	0.35	272.36	3,887.96	-153.14	-209.01	14,527,227.53	2,056,238.49	39° 59' 37.462 N	109° 30' 55.426 W
3,994.00	0.53	179.81	3,981.96	-153.57	-209.29	14,527,227.10	2,056,238.21	39° 59' 37.458 N	109° 30' 55.429 W
4,088.00	0.88	164.61	4,075.96	-154.70	-209.10	14,527,225.98	2,056,238.42	39° 59' 37.447 N	109° 30' 55.427 W
4,183.00	0.97	149.40	4,170.94	-156.09	-208.50	14,527,224.59	2,056,239.05	39° 59' 37.433 N	109° 30' 55.419 W
4,277.00	0.62	340.12	4,264.94	-156.30	-208.26	14,527,224.39	2,056,239.29	39° 59' 37.431 N	109° 30' 55.416 W
4,371.00	0.44	7.55	4,358.94	-155.46	-208.39	14,527,225.22	2,056,239.15	39° 59' 37.439 N	109° 30' 55.418 W
4,466.00	0.26	95.52	4,453.93	-155.12	-208.13	14,527,225.57	2,056,239.40	39° 59' 37.443 N	109° 30' 55.414 W
4,560.00	0.26	109.59	4,547.93	-155.21	-207.71	14,527,225.48	2,056,239.82	39° 59' 37.442 N	109° 30' 55.409 W
4,655.00	0.95	145.72	4,642.93	-155.94	-207.07	14,527,224.77	2,056,240.48	39° 59' 37.435 N	109° 30' 55.401 W
4,749.00	0.97	148.96	4,736.91	-157.26	-206.22	14,527,223.46	2,056,241.35	39° 59' 37.421 N	109° 30' 55.390 W
4,843.00	1.06	162.85	4,830.90	-158.77	-205.55	14,527,221.96	2,056,242.04	39° 59' 37.406 N	109° 30' 55.381 W
4,938.00	1.23	161.35	4,925.88	-160.58	-204.97	14,527,220.16	2,056,242.65	39° 59' 37.389 N	109° 30' 55.374 W
5,032.00	1.49	153.71	5,019.85	-162.63	-204.10	14,527,218.12	2,056,243.55	39° 59' 37.368 N	109° 30' 55.363 W
5,126.00	1.41	158.98	5,113.82	-164.81	-203.15	14,527,215.97	2,056,244.54	39° 59' 37.347 N	109° 30' 55.350 W
5,221.00	1.41	148.35	5,208.80	-166.89	-202.11	14,527,213.90	2,056,245.61	39° 59' 37.326 N	109° 30' 55.337 W
5,315.00	1.67	148.35	5,302.76	-169.04	-200.79	14,527,211.77	2,056,246.97	39° 59' 37.305 N	109° 30' 55.320 W
5,409.00	0.26	8.60	5,396.75	-170.00	-200.04	14,527,210.83	2,056,247.74	39° 59' 37.296 N	109° 30' 55.310 W
5,504.00	0.26	92.54	5,491.75	-169.80	-199.79	14,527,211.03	2,056,247.98	39° 59' 37.298 N	109° 30' 55.307 W
5,598.00	0.35	57.20	5,585.75	-169.65	-199.34	14,527,211.19	2,056,248.44	39° 59' 37.299 N	109° 30' 55.301 W
5,692.00	0.75	95.04	5,679.74	-169.55	-198.48	14,527,211.30	2,056,249.29	39° 59' 37.300 N	109° 30' 55.290 W
5,787.00	0.53	109.32	5,774.74	-169.75	-197.45	14,527,211.12	2,056,250.32	39° 59' 37.298 N	109° 30' 55.277 W
5,881.00	0.70	118.02	5,868.73	-170.16	-196.53	14,527,210.72	2,056,251.25	39° 59' 37.294 N	109° 30' 55.265 W
5,975.00	0.79	106.60	5,962.72	-170.62	-195.40	14,527,210.29	2,056,252.38	39° 59' 37.289 N	109° 30' 55.251 W

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,070.00	0.97	123.21	6,057.71	-171.24	-194.10	14,527,209.68	2,056,253.69	39° 59' 37.283 N	109° 30' 55.234 W
6,164.00	0.97	180.34	6,151.70	-172.48	-193.44	14,527,208.46	2,056,254.38	39° 59' 37.271 N	109° 30' 55.226 W
6,258.00	1.32	183.94	6,245.68	-174.35	-193.52	14,527,206.58	2,056,254.33	39° 59' 37.253 N	109° 30' 55.227 W
6,353.00	0.26	188.34	6,340.67	-175.66	-193.63	14,527,205.28	2,056,254.24	39° 59' 37.240 N	109° 30' 55.228 W
6,447.00	0.62	161.18	6,434.67	-176.35	-193.49	14,527,204.59	2,056,254.39	39° 59' 37.233 N	109° 30' 55.226 W
6,542.00	0.62	138.68	6,529.66	-177.22	-192.99	14,527,203.72	2,056,254.91	39° 59' 37.224 N	109° 30' 55.220 W
6,636.00	0.88	143.95	6,623.66	-178.19	-192.23	14,527,202.77	2,056,255.68	39° 59' 37.215 N	109° 30' 55.210 W
6,730.00	0.26	131.65	6,717.65	-178.91	-191.64	14,527,202.05	2,056,256.28	39° 59' 37.207 N	109° 30' 55.203 W
6,825.00	0.47	150.70	6,812.65	-179.39	-191.29	14,527,201.58	2,056,256.64	39° 59' 37.203 N	109° 30' 55.198 W
6,919.00	0.79	149.75	6,906.64	-180.29	-190.78	14,527,200.69	2,056,257.17	39° 59' 37.194 N	109° 30' 55.191 W
7,013.00	0.97	164.43	7,000.63	-181.62	-190.24	14,527,199.37	2,056,257.73	39° 59' 37.181 N	109° 30' 55.185 W
7,108.00	0.44	239.93	7,095.63	-182.57	-190.34	14,527,198.41	2,056,257.65	39° 59' 37.171 N	109° 30' 55.186 W
7,202.00	0.44	223.58	7,189.62	-183.02	-190.90	14,527,197.96	2,056,257.09	39° 59' 37.167 N	109° 30' 55.193 W
7,296.00	0.53	233.78	7,283.62	-183.54	-191.50	14,527,197.43	2,056,256.50	39° 59' 37.162 N	109° 30' 55.201 W
7,390.00	0.53	194.23	7,377.62	-184.21	-191.96	14,527,196.75	2,056,256.06	39° 59' 37.155 N	109° 30' 55.207 W
7,485.00	0.53	161.71	7,472.61	-185.06	-191.93	14,527,195.91	2,056,256.10	39° 59' 37.147 N	109° 30' 55.206 W
7,579.00	0.62	152.83	7,566.61	-185.92	-191.56	14,527,195.05	2,056,256.48	39° 59' 37.138 N	109° 30' 55.201 W
7,674.00	1.14	264.01	7,661.60	-186.48	-192.26	14,527,194.48	2,056,255.79	39° 59' 37.133 N	109° 30' 55.211 W
7,768.00	0.79	279.13	7,755.59	-186.47	-193.83	14,527,194.46	2,056,254.22	39° 59' 37.133 N	109° 30' 55.231 W
7,862.00	0.53	301.80	7,849.58	-186.14	-194.84	14,527,194.77	2,056,253.20	39° 59' 37.136 N	109° 30' 55.244 W
7,957.00	0.44	262.87	7,944.58	-185.95	-195.58	14,527,194.95	2,056,252.47	39° 59' 37.138 N	109° 30' 55.253 W
8,051.00	0.35	244.68	8,038.58	-186.12	-196.19	14,527,194.77	2,056,251.85	39° 59' 37.136 N	109° 30' 55.261 W
8,145.00	0.70	214.12	8,132.57	-186.72	-196.78	14,527,194.16	2,056,251.28	39° 59' 37.130 N	109° 30' 55.269 W
8,240.00	0.62	185.44	8,227.57	-187.71	-197.15	14,527,193.16	2,056,250.92	39° 59' 37.120 N	109° 30' 55.273 W
8,334.00	0.53	157.93	8,321.56	-188.62	-197.03	14,527,192.26	2,056,251.05	39° 59' 37.111 N	109° 30' 55.272 W
8,428.00	0.53	167.07	8,415.56	-189.45	-196.77	14,527,191.43	2,056,251.33	39° 59' 37.103 N	109° 30' 55.269 W
8,523.00	0.62	140.27	8,510.55	-190.27	-196.35	14,527,190.62	2,056,251.77	39° 59' 37.095 N	109° 30' 55.263 W
8,617.00	0.62	160.30	8,604.55	-191.14	-195.85	14,527,189.76	2,056,252.28	39° 59' 37.087 N	109° 30' 55.257 W
8,711.00	1.06	133.05	8,698.54	-192.21	-195.04	14,527,188.70	2,056,253.10	39° 59' 37.076 N	109° 30' 55.246 W
8,805.00	1.41	145.71	8,792.52	-193.76	-193.76	14,527,187.17	2,056,254.42	39° 59' 37.061 N	109° 30' 55.230 W
8,900.00	1.41	138.15	8,887.49	-195.60	-192.32	14,527,185.36	2,056,255.88	39° 59' 37.042 N	109° 30' 55.211 W
8,994.00	1.93	135.16	8,981.45	-197.58	-190.43	14,527,183.41	2,056,257.80	39° 59' 37.023 N	109° 30' 55.187 W
9,088.00	1.67	144.66	9,075.40	-199.82	-188.52	14,527,181.20	2,056,259.75	39° 59' 37.001 N	109° 30' 55.162 W
9,182.00	1.85	133.85	9,169.36	-201.99	-186.64	14,527,179.06	2,056,261.67	39° 59' 36.979 N	109° 30' 55.138 W
9,277.00	1.76	140.79	9,264.31	-204.18	-184.61	14,527,176.90	2,056,263.74	39° 59' 36.958 N	109° 30' 55.112 W
9,371.00	1.85	154.76	9,358.26	-206.67	-183.05	14,527,174.44	2,056,265.34	39° 59' 36.933 N	109° 30' 55.092 W
9,465.00	2.02	148.08	9,452.21	-209.45	-181.53	14,527,171.69	2,056,266.91	39° 59' 36.906 N	109° 30' 55.073 W
9,559.00	2.02	151.86	9,546.15	-212.32	-179.87	14,527,168.85	2,056,268.61	39° 59' 36.877 N	109° 30' 55.051 W
9,654.00	2.37	143.03	9,641.08	-215.37	-177.90	14,527,165.83	2,056,270.63	39° 59' 36.847 N	109° 30' 55.026 W
9,705.00	2.37	144.74	9,692.04	-217.07	-176.65	14,527,164.15	2,056,271.90	39° 59' 36.830 N	109° 30' 55.010 W
LAST SDI MWD PRODUCTION SURVEY									
9,765.00	2.37	144.74	9,751.99	-219.10	-175.22	14,527,162.15	2,056,273.37	39° 59' 36.810 N	109° 30' 54.992 W
SDI PROJECTION TO TD									

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 921-35G Pad
Well: NBU 921-35G4BS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 921-35G4BS
TVD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
MD Reference: GL 5119' & KB 25' @ 5144.00ft (HP 311)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
196.00	196.00	-0.45	0.96	FIRST SDI MWD SURFACE SURVEY
2,416.00	2,406.20	-115.18	-162.48	LAST SDI MWD SURFACE SURVEY
2,485.00	2,474.89	-118.79	-167.85	FIRST SDI MWD PRODUCTION SURVEY
9,705.00	9,692.04	-217.07	-176.65	LAST SDI MWD PRODUCTION SURVEY
9,765.00	9,751.99	-219.10	-175.22	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____