API Well No: 43047512550000 Received: 8/13/2010

FORM 3

AMENDED REPORT ☑

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

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
NBU 921-25J4CS

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

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)
UO 1194 ST

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

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

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 ◉ (Submit Commingling Application) NO ○

19. SLANT
VERTICAL ○ DIRECTIONAL ◉ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1886 FSL 1743 FEL	NWSE	25	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	1604 FSL 1920 FEL	NWSE	25	9.0 S	21.0 E	S
At Total Depth	1604 FSL 1920 FEL	NWSE	25	9.0 S	21.0 E	S

21. COUNTY
UINTAH

22. DISTANCE TO NEAREST LEASE LINE (Feet)
1604

23. NUMBER OF ACRES IN DRILLING UNIT
1083

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
320

26. PROPOSED DEPTH
MD: 9604 TVD: 9581

27. ELEVATION - GROUND LEVEL
4959

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

☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**

☑ **COMPLETE DRILLING PLAN**

☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**

☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**

☑ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**

☑ **TOPOGRAPHICAL MAP**

NAME Danielle Piernot **TITLE** Regulatory Analyst **PHONE** 720 929-6156

SIGNATURE **DATE** 08/13/2010 **EMAIL** gnbregulatory@anadarko.com

API NUMBER ASSIGNED
43047512550000

APPROVAL

Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	9604		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 Buttress	9604	11.6			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	11	8.625	0	2360		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	2360	28.0			

NBU 921-25J4CS

Pad: NBU 921-25J4
Surface: 1,886’ FSL 1,743’ FEL (NW/4SE/4)
BHL: 1,604’ FSL 1,920’ FEL (NW/4SE/4)
Section 25 T9S R21E

Uintah County, Utah
Mineral Lease: UO 1194 ST

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

Formation	Depth	Resource
Uinta	0 – Surface	
Green River	1,439’	
Birds Nest	1,722’	Water
Mahogany	2,105’	Water
Wasatch	4,683’	Gas
Mesaverde	7,353’	Gas
MVU2	8,261’	Gas
MVL1	8,811’	Gas
TVD	9,581’	
TD	9,604’	

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.

'APIWellNo:43047512550000'

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9,581' TVD, approximately equals 6,069 psi (calculated at 0.63 psi/foot).

Maximum anticipated surface pressure equals approximately 3,961 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

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

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

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

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

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

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

'APIWellNo:43047512550000'

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

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole 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 9-5/8 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.

'APIWellNo:43047512550000'

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

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

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

10. Other Information:

Please refer to the attached Drilling Program.

'APIWellNo:43047512550000'

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	August 12, 2010
WELL NAME	**NBU 921-25J4CS**	TD	9,581' TVD 9,604' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah
		FINISHED ELEVATION	4,959'
SURFACE LOCATION	NW/4 SE/4 1,886' FSL 1,743' FEL	Sec 25 T 9S R 21E	
	Latitude: 40.004947	Longitude: -109.496190	NAD 27
BTM HOLE LOCATION	NW/4 SE/4 1,604' FSL 1,920' FEL	Sec 25 T 9S R 21E	
	Latitude: 40.004174	Longitude: -109.496819	NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: UDOGM (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept.		

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'	14"		
			11"	8-5/8", 28#, IJ-55, LTC	Air mist
All water flows encountered while drilling will be reported to the appropriate agencies.					
	Green River @	**1,439'**			
	Top of Birds Nest @	**1,722'**			
	Mahogany @	**2,105'**			
	Preset f/ GL @	**2,360' MD**			
	Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.				
	Wasatch @	**4,683'**			
Mud logging program TBD Cased hole logging program from TD - surf csg			7-7/8"	4-1/2" 11.6# I-80 or equivalent BTC csg	Water / Fresh Water Mud 8.3-12.4 ppg
	Mverde @	**7,353' TVD**			
	MVU2 @	**8,261' TVD**			
	MVU1 @	**8,811' TVD**			
Max anticipated Mud required 12.4 ppg	**TD @**	**9,581' TVD** **9,604' MD**			

'APIWellNo:43047512550000'

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	2,360	28.00	IJ-55	LTC	0.83	1.70	5.21
								7,780	6,350	278,000
PRODUCTION	4-1/2"	0	to	9,604	11.60	I-80	BTC	1.91	1.03	2.86

*Burst on suface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.28

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 = 12.4 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3,961 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 12.4 ppg) 0.63 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 6,069 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	TAIL	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	1,860'	65/35 Poz + 6% Gel + 10 pps gilsonite	170	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,174'	Premium Lite II +0.25 pps	300	10%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,430'	50/50 Poz/G + 10% salt + 2% gel	1,050	10%	14.30	1.31
			+ 0.1% R-3				

*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.

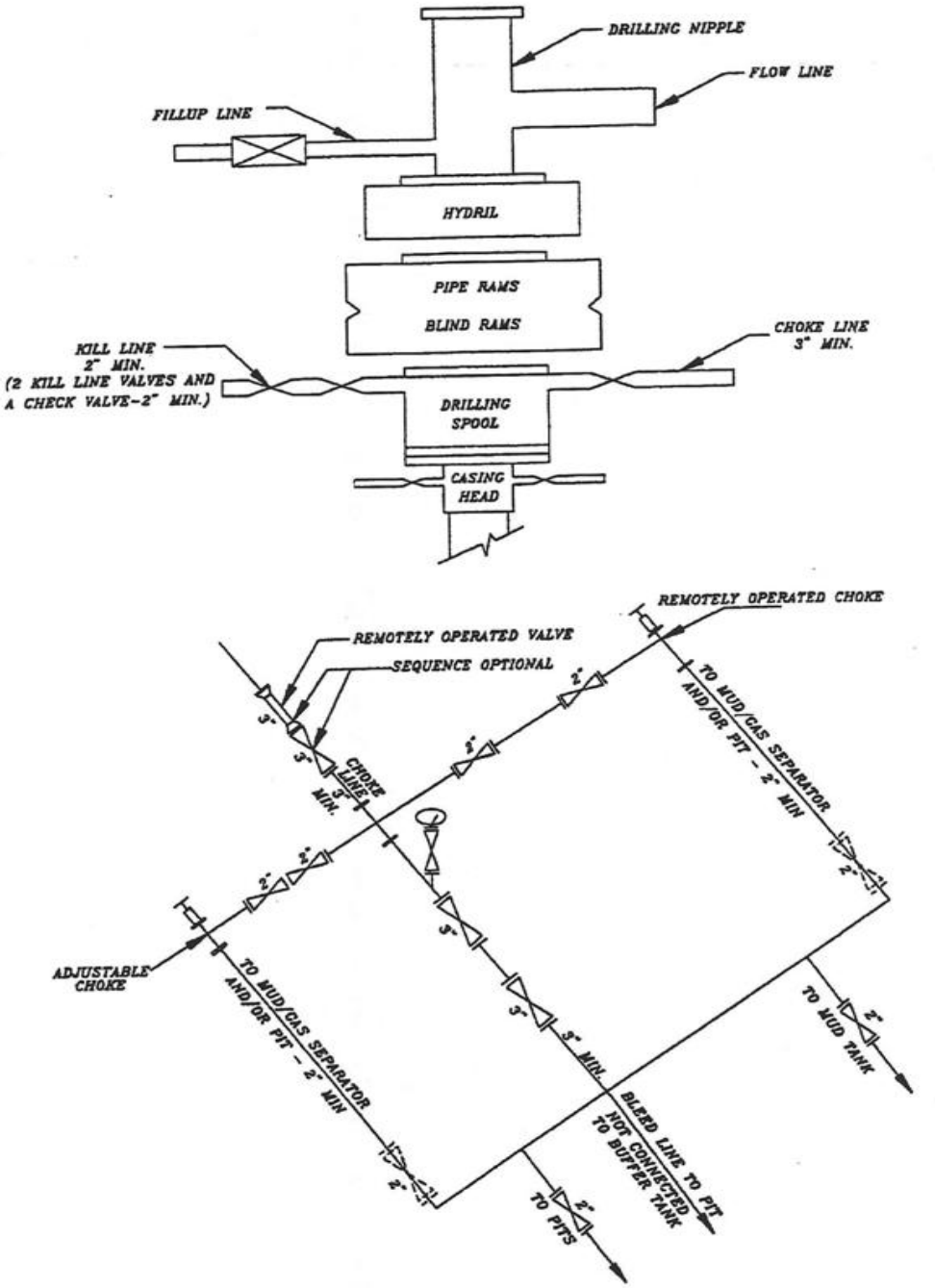
Surveys will be taken at 1,000' minimum intervals.

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

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: _____ **DATE:** _____
John Merkel / Lovel Young

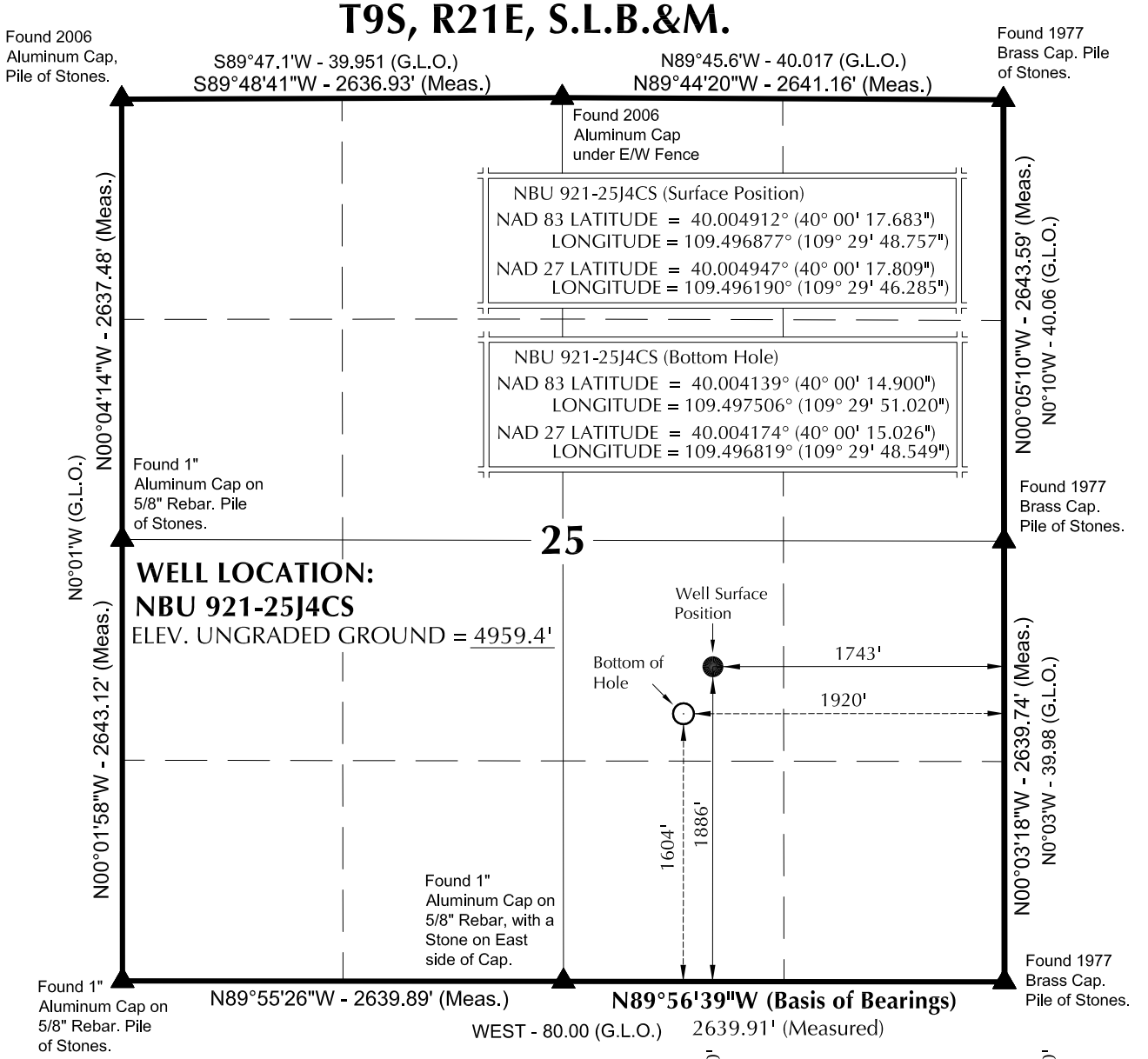
EXHIBIT A
NBU 921-25J4CS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

'APIWellNo:43047512550000'

T9S, R21E, S.L.B.&M.



NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S32°02'57"W 332.23' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. Basis of elevation is Tri-Sta "Two Water" located in the NW $\frac{1}{4}$ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

N

1000' 500' 0' 1000'

SCALE

SURVEYOR'S CERTIFICATE

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

PROFESSIONAL LAND SURVEYOR No.6028691 JOHN R LAUGHE STATE OF UTAH

PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

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

WELL PAD: NBU 921-25J4

NBU 921-25J4CS
WELL PLAT
1604' FSL, 1920' FEL (Bottom Hole)
NW $\frac{1}{4}$ SE $\frac{1}{4}$ OF SECTION 25, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
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

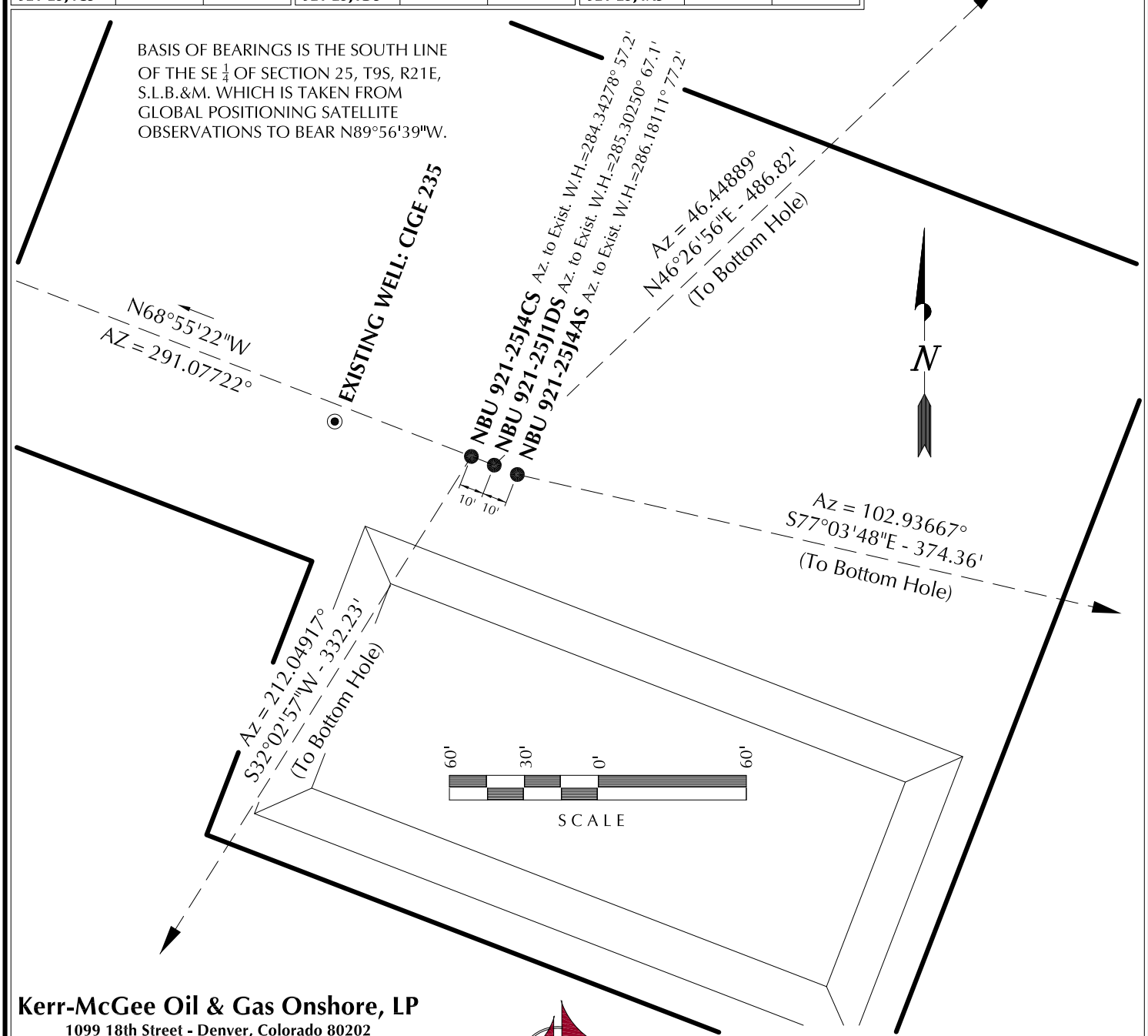
DATE SURVEYED: 06-04-10	SURVEYED BY: M.S.B.	SHEET NO: 1
DATE DRAWN: 06-09-10	DRAWN BY: K.H.G.	1 OF 15
SCALE: 1" = 1000'	Date Last Revised:	

'APIWellNo:43047512550000'

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27			NAD83		NAD27		
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	FOOTAGES	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	FOOTAGES
NBU 921-25J4CS	40°00'17.683" 40.004912°	109°29'48.757" 109.496877°	40°00'17.809" 40.004947°	109°29'46.285" 109.496190°	1886' FSL 1743' FEL	40°00'14.900" 40.004139°	109°29'51.020" 109.497506°	40°00'15.026" 40.004174°	109°29'48.549" 109.496819°	1604' FSL 1920' FEL
NBU 921-25J1DS	40°00'17.648" 40.004902°	109°29'48.637" 109.496844°	40°00'17.774" 40.004937°	109°29'46.166" 109.496157°	1882' FSL 1734' FEL	40°00'20.963" 40.005823°	109°29'44.106" 109.495585°	40°00'21.089" 40.005858°	109°29'41.635" 109.494899°	2218' FSL 1381' FEL
NBU 921-25J4AS	40°00'17.611" 40.004892°	109°29'48.517" 109.496810°	40°00'17.737" 40.004927°	109°29'46.046" 109.496124°	1878' FSL 1725' FEL	40°00'16.784" 40.004662°	109°29'43.829" 109.495508°	40°00'16.910" 40.004697°	109°29'41.358" 109.494822°	1795' FSL 1360' FEL
CIGE 235	40°00'17.823" 40.004951°	109°29'49.469" 109.497075°	40°00'17.949" 40.004986°	109°29'46.998" 109.496388°	1900' FSL 1799' FEL					

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
NBU 921-25J4CS	-281.6'	-176.3'	**NBU 921-25J1DS**	335.4'	352.8'	**NBU 921-25J4AS**	-83.8'	364.9'



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

WELL PAD - NBU 921-25J4

WELL PAD INTERFERENCE PLAT
WELLS - NBU 921-25J4CS, NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E, S.L.B.&M., UINTAH COUNTY, UTAH.

609
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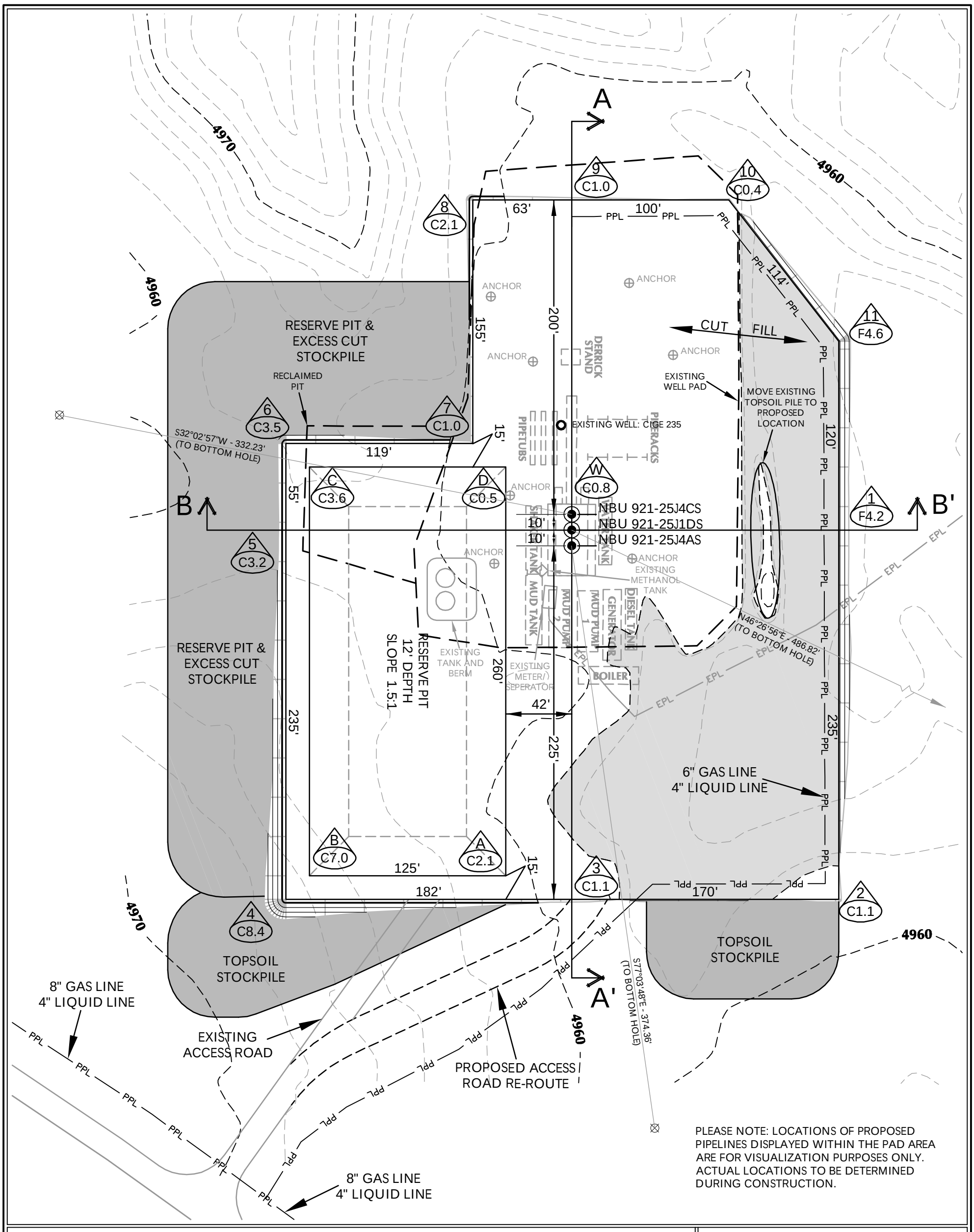
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 06-04-10	SURVEYED BY: M.S.B.	SHEET NO:
DATE DRAWN: 06-09-10	DRAWN BY: K.H.G.	4
SCALE: 1" = 60'	Date Last Revised:	4 OF 15

'APIWellNo:43047512550000'



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 921-25J4 DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 4959.3'
FINISHED GRADE ELEVATION = 4958.5'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1
TOTAL WELL PAD AREA = 3.27 ACRES
TOTAL DAMAGE AREA = 6.17 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00

WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 5,896 C.Y.
TOTAL FILL FOR WELL PAD = 4,674 C.Y.
TOPSOIL @ 6" DEPTH = 1,682 C.Y.
EXCESS MATERIAL = 1,222 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT
+/- 11,560 CY
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 44,420 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

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

WELL PAD - NBU 921-25J4

WELL PAD - LOCATION LAYOUT
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH

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Fax 307-674-0182

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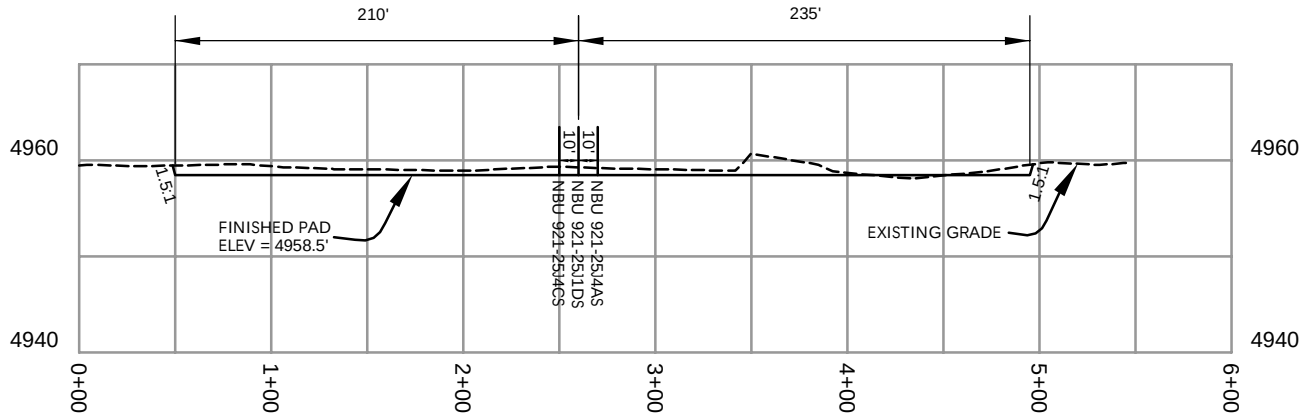
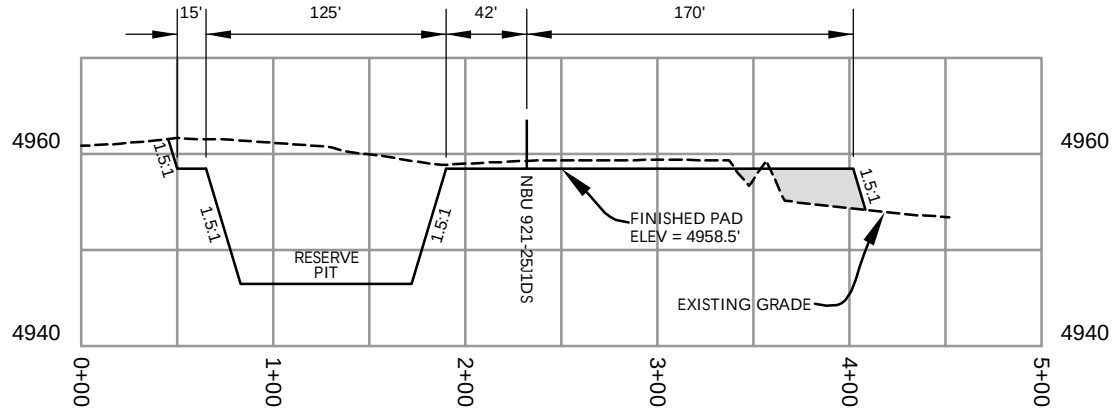
209 NORTH 300 WEST - VERNAL, UTAH 84078

Scale: 1"=60'	Date: 7/7/10	SHEET NO:
REVISED:	TAR 8/31/10	5

C:\ANADARKO\2010_34_NBU_FOCUS_SEC_921-25\DWGS\NBU 921-25J4\921-25J4.dwg, 9/1/2010 4:53:35 PM



CROSS SECTION A-A'



CROSS SECTION B-B'

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

WELL PAD - NBU 921-25J4

WELL PAD - CROSS SECTIONS
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH

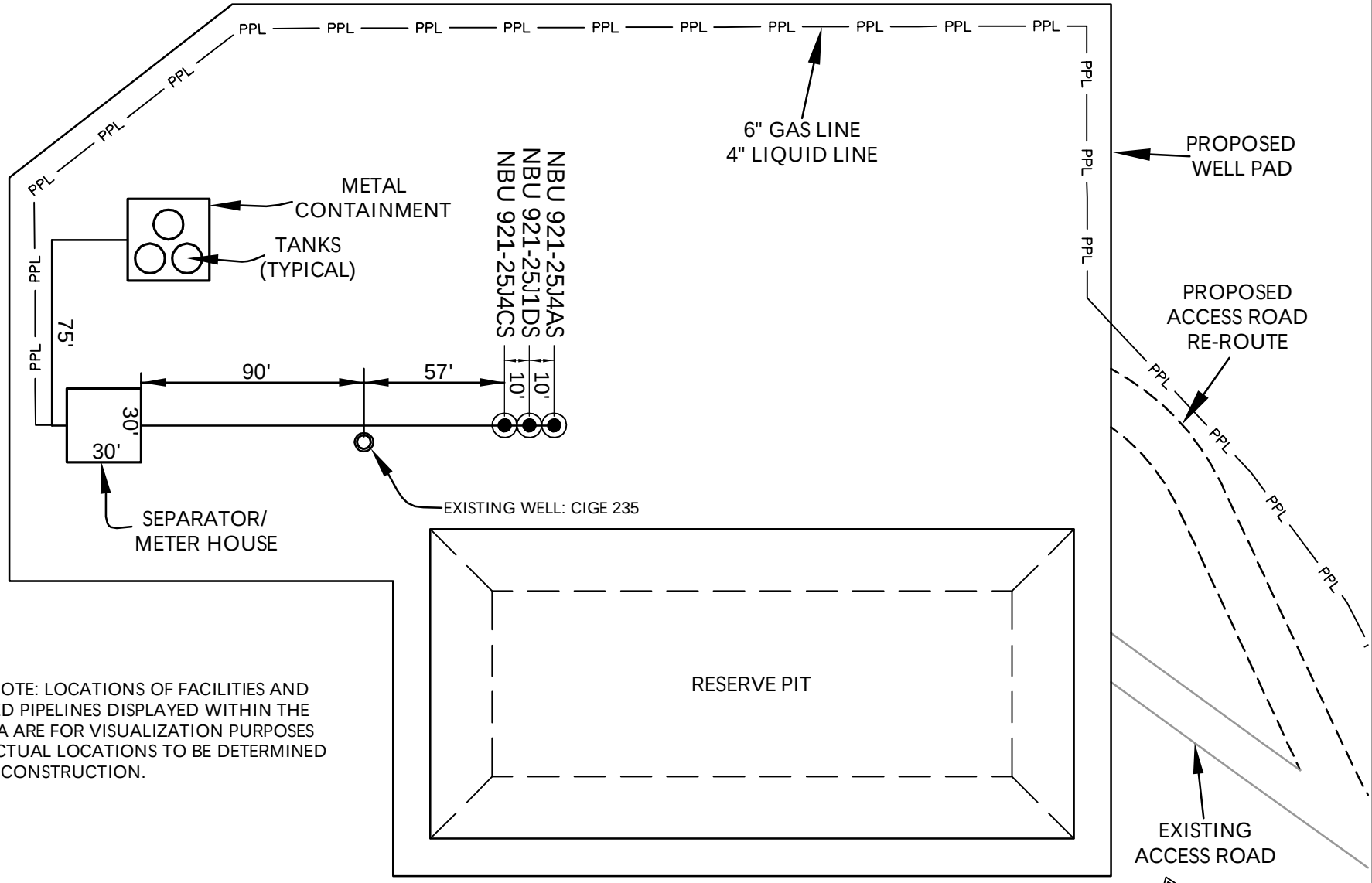
609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

HORIZONTAL 0 50 100 1" = 100'
VERTICAL 0 10 20 1" = 20'

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

Scale: 1"=100'	Date: 7/7/10	SHEET NO:
REVISED:	JID 8/2/10	6

API WellNo:43047512550000'
K:\ANADARKO\2010_34_NBU_FOCUS_SEC_921-25\DWGS\NBU 921-25J4\921-25J.dwg, 8/2/2010 8:54:14 AM



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.

WELL PAD LEGEND

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

HORIZONTAL 0 30' 60' 1" = 60'

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

WELL PAD - NBU 921-25J4

WELL PAD - FACILITIES DIAGRAM
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
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

Scale: 1"=60'	Date: 7/7/10	SHEET NO:
REVISED:	TAR 8/31/10	7

7 OF 15

API WellNo:43047512550000'
K:\ANADARKO\2010_34_NBU_FOCUS_SEC_921-25\DWGS\NBU 921-25J4\921-25J4.dwg, 8/31/2010 9:15:30 AM

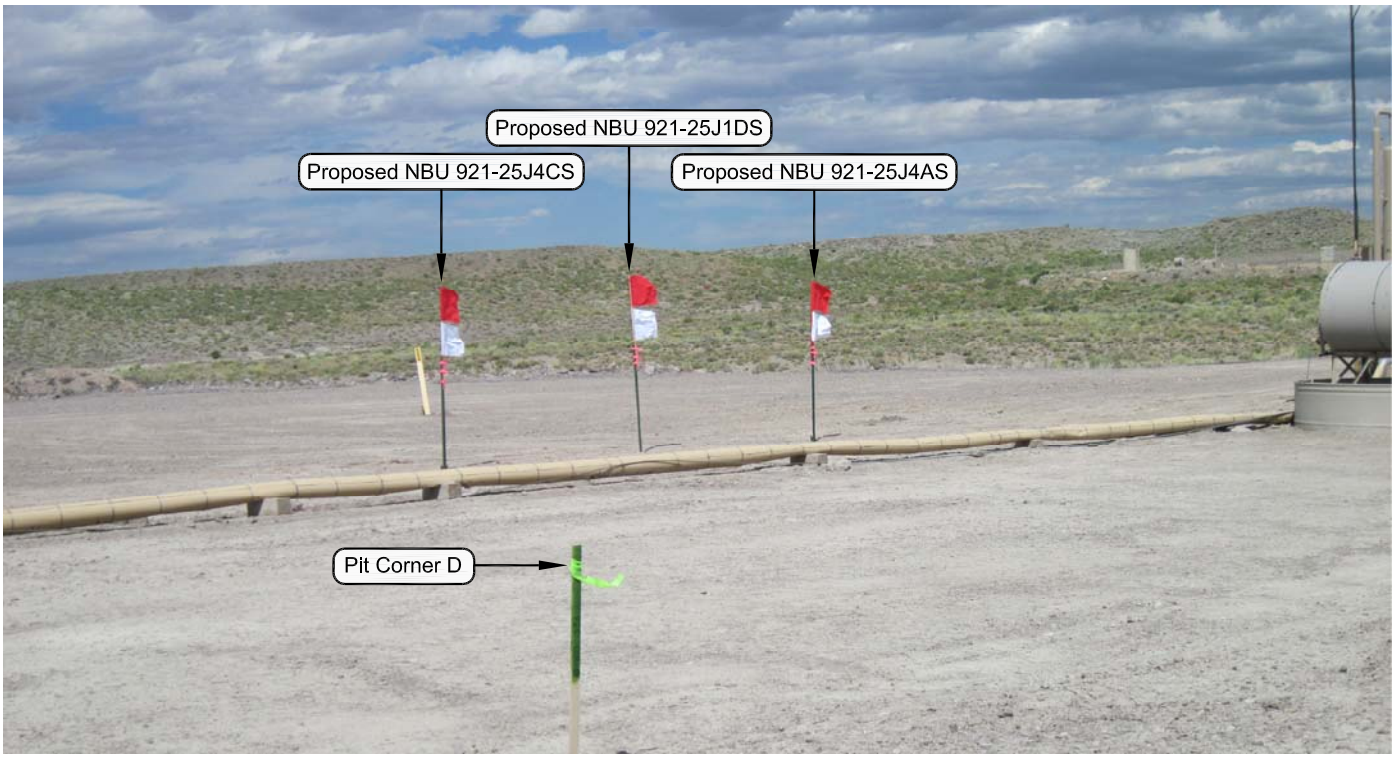


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE **CAMERA ANGLE: NORTHEASTERLY**

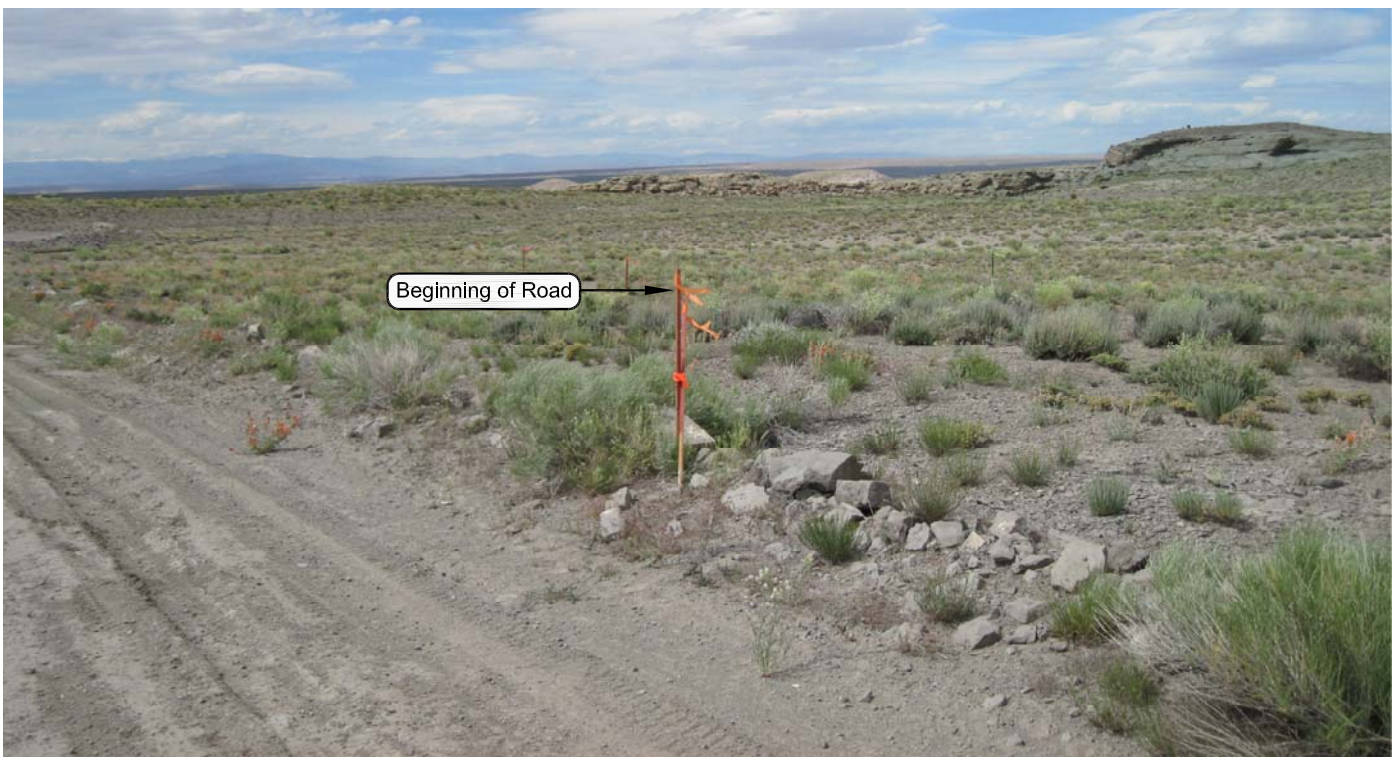


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD **CAMERA ANGLE: NORTHERLY**

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

WELL PAD - NBU 921-25J4

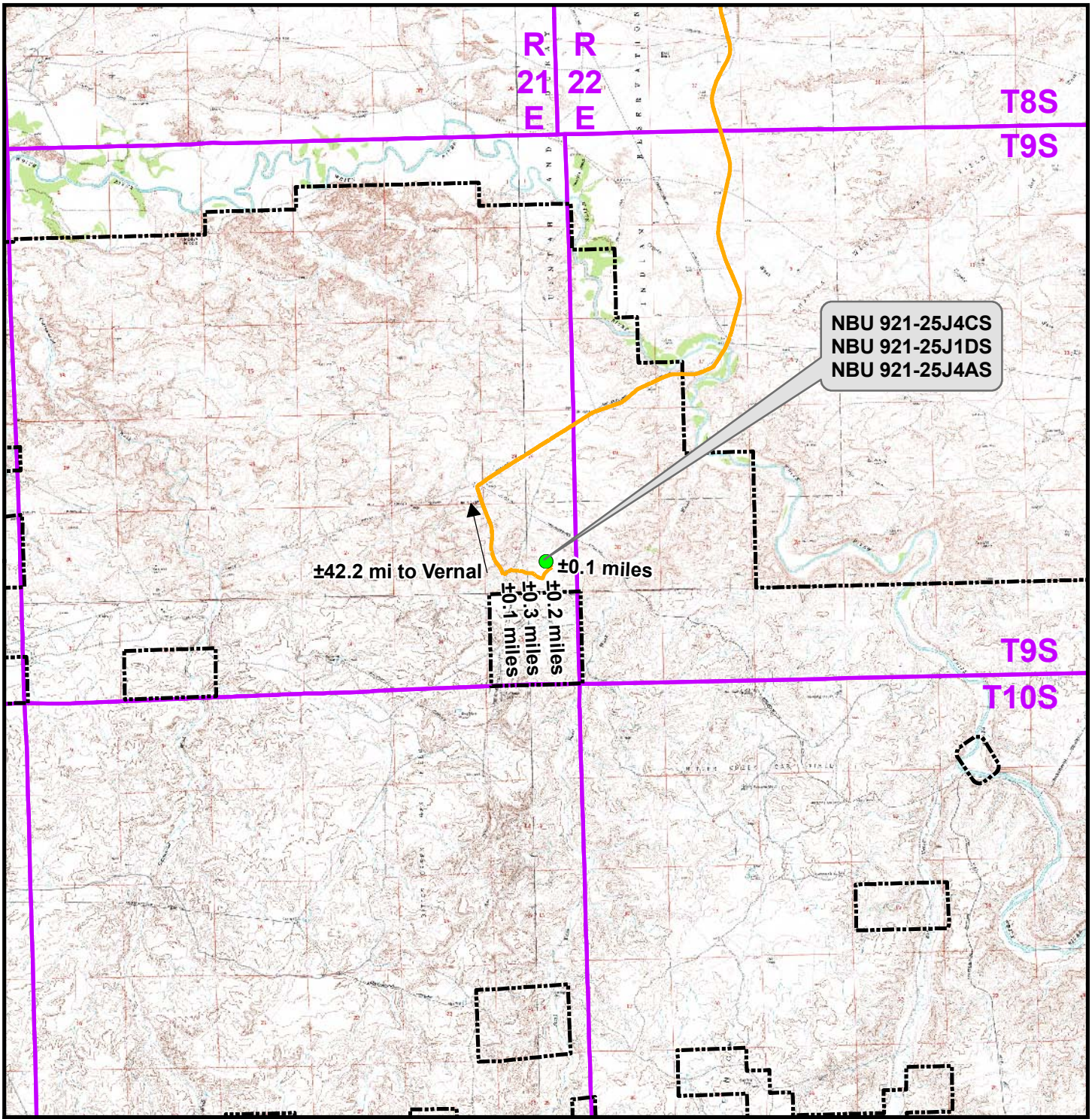
LOCATION PHOTOS
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.

609
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

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

DATE PHOTOS TAKEN: 06-04-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO:
DATE DRAWN: 06-09-10	DRAWN BY: K.H.G.	8
Date Last Revised:		8 OF 15

'APIWellNo:43047512550000'



Legend

Distance From Well Pad - NBU 921-25J4 To Unit Boundary: ±1,878ft

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

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

WELL PAD - NBU 921-25J4

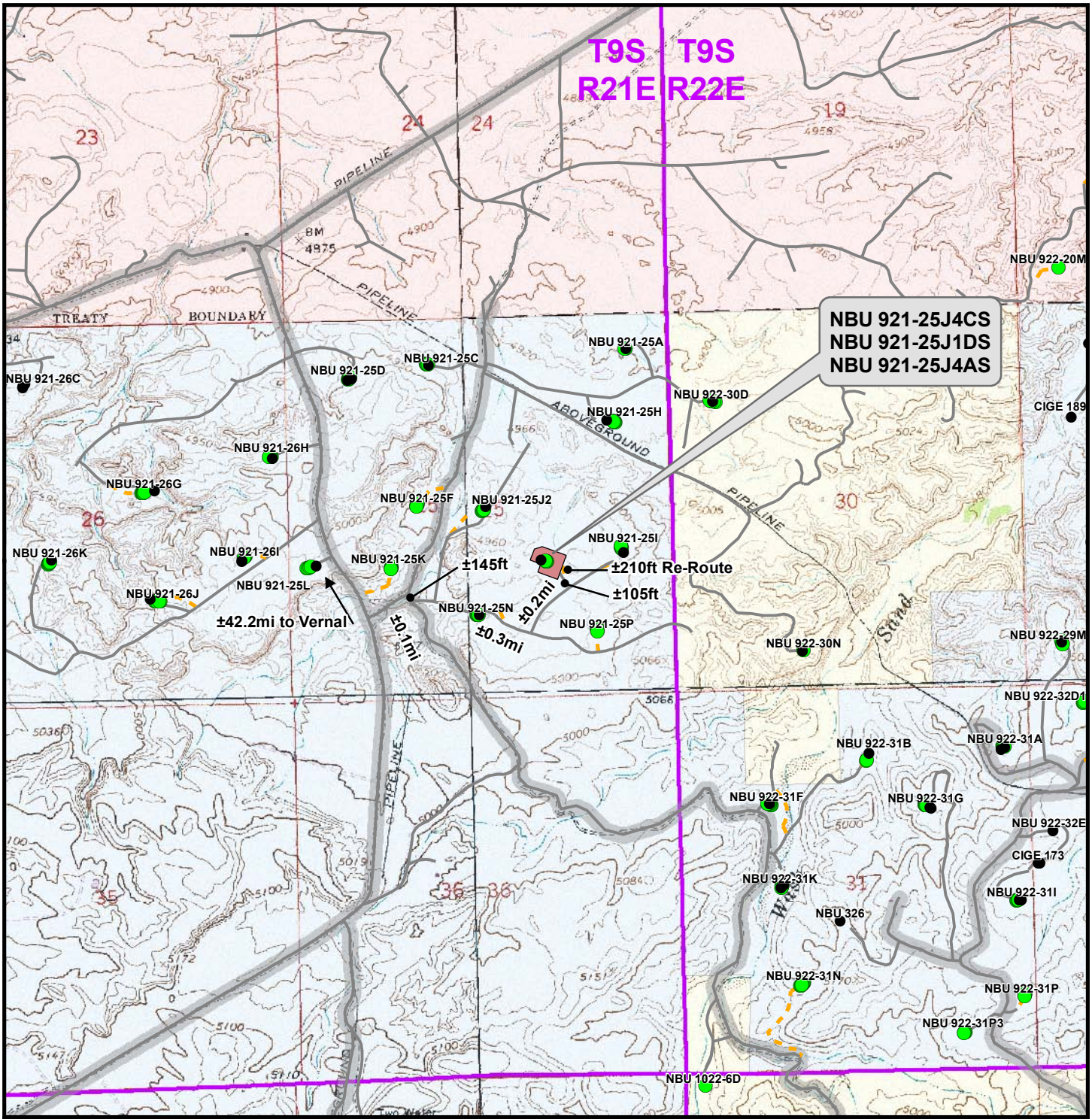
TOPO A
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1:100,000	NAD83 USP Central		Sheet No: 9
Drawn: JFE	Date: 7 July 2010		
Revised: JID	Date: 2 Aug 2010		9 of 15

'APIWellNo:43047512550000'



Legend

Total Proposed Road Re-Route Length: ±210ft

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

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

WELL PAD - NBU 921-25J4

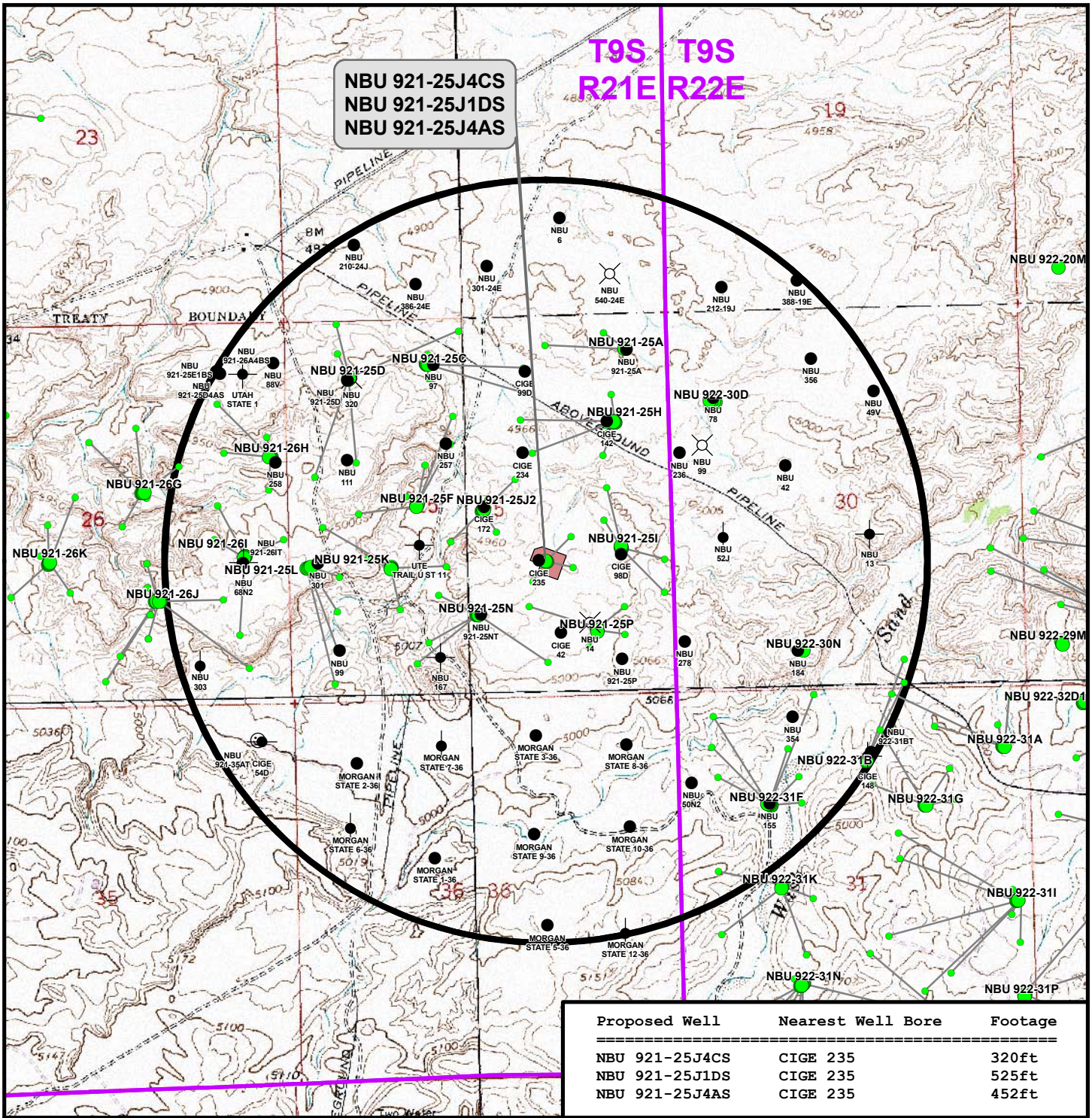
TOPO B
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2,000ft	NAD83 USP Central		Sheet No: 10
Drawn: JFE	Date: 7 July 2010		10 of 15
Revised: JFE	Date: 31 Aug 2010		

'APIWellNo:43047512550000'



Proposed Well	Nearest Well Bore	Footage
NBU 921-25J4CS	CIGE 235	320ft
NBU 921-25J1DS	CIGE 235	525ft
NBU 921-25J4AS	CIGE 235	452ft

Legend

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

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- 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 921-25J4

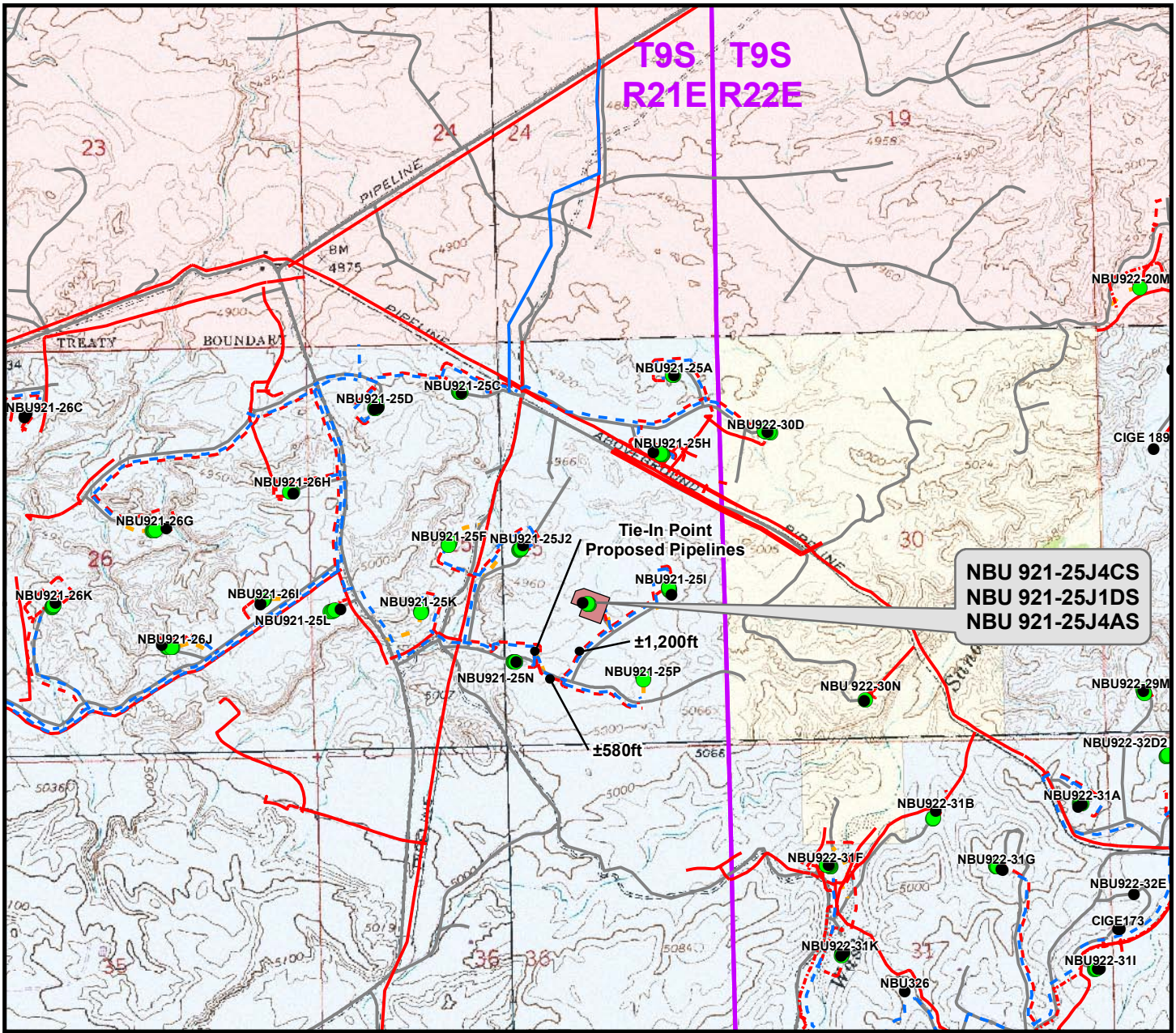
TOPO C
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2,000ft	NAD83 USP Central		Sheet No: 11
Drawn: JFE	Date: 7 July 2010		
Revised: JFE	Date: 31 Aug 2010		

'APIWellNo:43047512550000'



Proposed Liquid Pipeline	Length
Proposed 4" (Meter House to Edge of Pad)	±700ft
Proposed 4" (Edge of Pad to 25N Intersection)	±1,780ft
TOTAL PROPOSED LIQUID PIPELINE =	± 2,480ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±700ft
Proposed 6" (Edge of Pad to 25I Intersection)	±310ft
Proposed 8" (25I Intersection to 25P Intersection)	±890ft
Proposed 10"(25P Intersection to 25N Intersection)	±580ft
TOTAL PROPOSED GAS PIPELINE =	±2,480ft

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 921-25J4

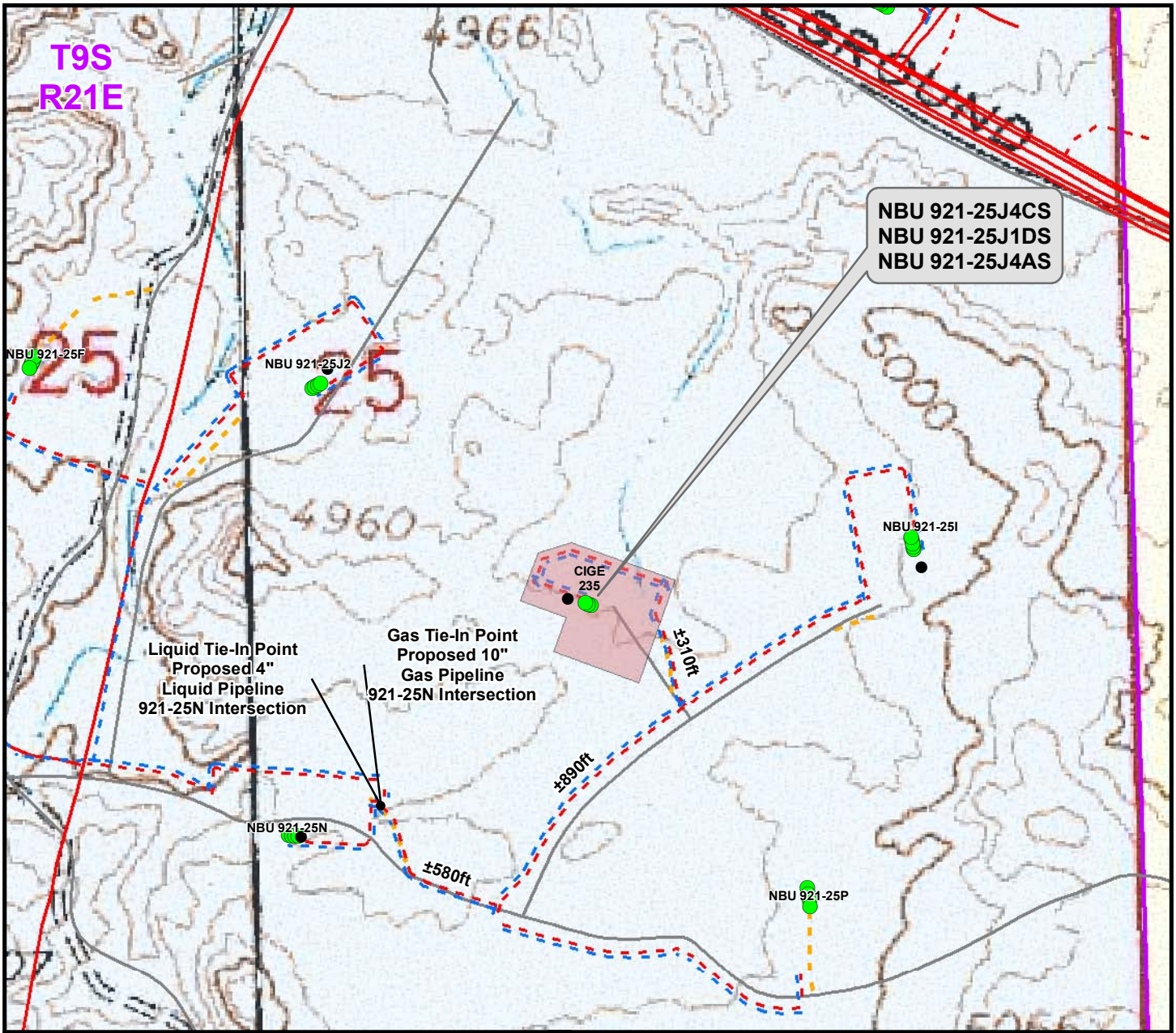
TOPO D
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2,000ft	NAD83 USP Central		Sheet No: 12
Drawn: CPS	Date: 7 July 2010		12 of 15
Revised: JFE	Date: 31 Aug 2010		

'APIWellNo:43047512550000'



Proposed Liquid Pipeline	Length
Proposed 4" (Meter House to Edge of Pad)	±700ft
Proposed 4" (Edge of Pad to 25N Intersection)	±1,780ft
TOTAL PROPOSED LIQUID PIPELINE =	± 2,480ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±700ft
Proposed 6" (Edge of Pad to 25I Intersection)	±310ft
Proposed 8" (25I Intersection to 25P Intersection)	±890ft
Proposed 10"(25P Intersection to 25N Intersection)	±580ft
TOTAL PROPOSED GAS PIPELINE =	±2,480ft

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 921-25J4

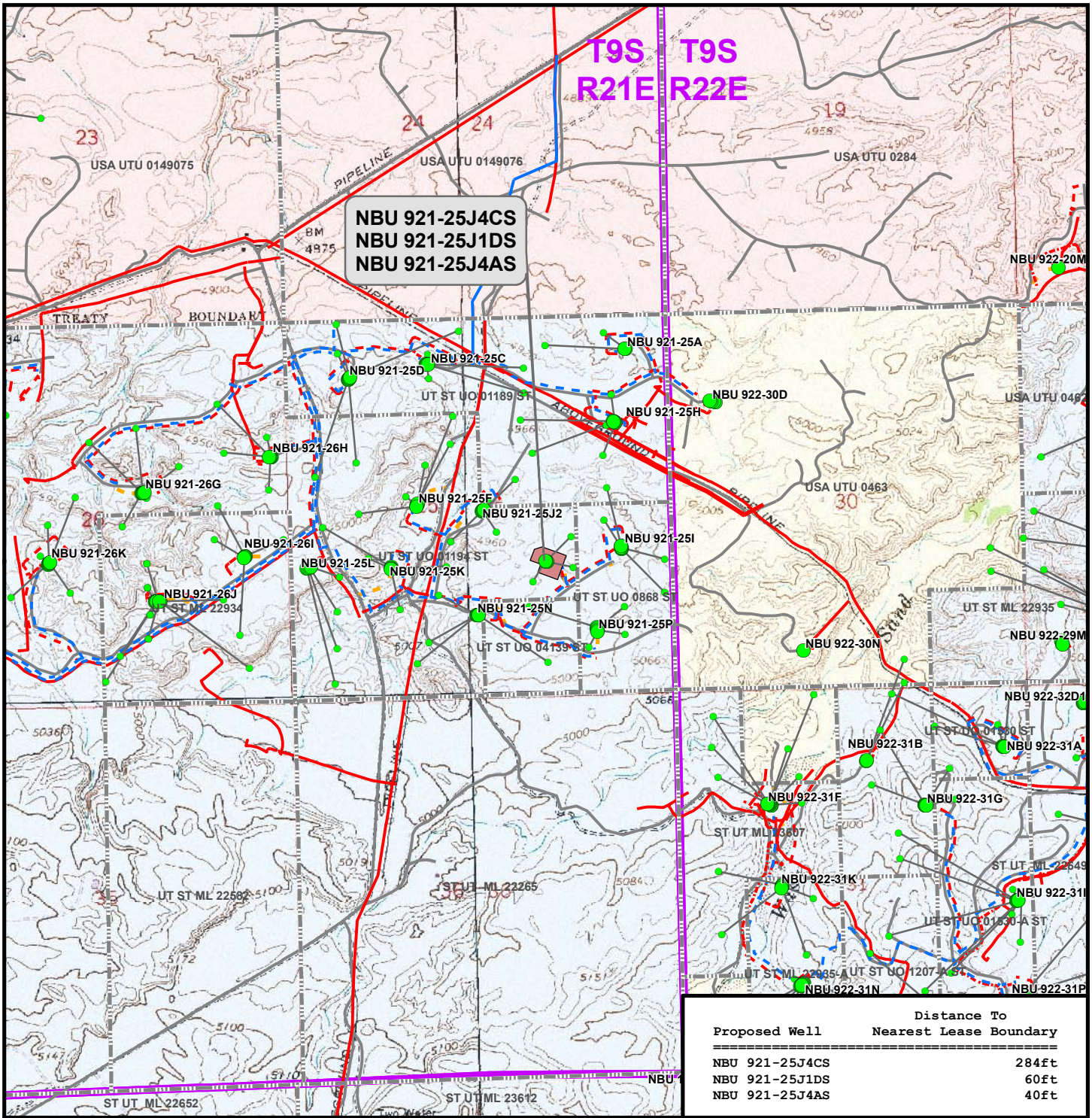
TOPO D2 (PAD & PIPELINE DETAIL)
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 500ft	NAD83 USP Central		Sheet No: 13
Drawn: CPS	Date: 7 July 2010		
Revised: JFE	Date: 31 Aug 2010		13 of 15

'APIWellNo:43047512550000'



Proposed Well	Distance To Nearest Lease Boundary
NBU 921-25J4CS	284ft
NBU 921-25J1DS	60ft
NBU 921-25J4AS	40ft

Legend

- Well - Proposed
- Bottom Hole - Proposed
- 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 921-25J4

TOPO E
NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
LOCATED IN SECTION 25, T9S, R21E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182

N

Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:	
Drawn: CPS	Date: 7 July 2010	14	14 of 15
Revised: JFE	Date: 31 Aug 2010		

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 921-25J4
WELLS – NBU 921-25J4CS,
NBU 921-25J1DS & NBU 921-25J4AS
Section 25, 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 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along Class D County Road approximately 0.1 miles to a second Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along second Class D County Road approximately 145 feet to a service road to the east. Exit left and proceed in an easterly then southeasterly direction along service road approximately 0.3 miles to a second service road to the northeast. Exit left and proceed in a northeasterly direction along second service road approximately 0.2 miles to third service road to the northwest. Exit left and proceed in a northwesterly direction along third service road approximately 0.1 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 42.9 miles in a southerly direction.

'APIWellNo:43047512550000'

Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT UTM12
Site: NBU 921-25J Pad
Well: NBU 921-25J4CS
Wellbore: OH
Design: Plan #1

Anadarko Petroleum Corporation

Kerr McGee Oil and Gas Onshore LP

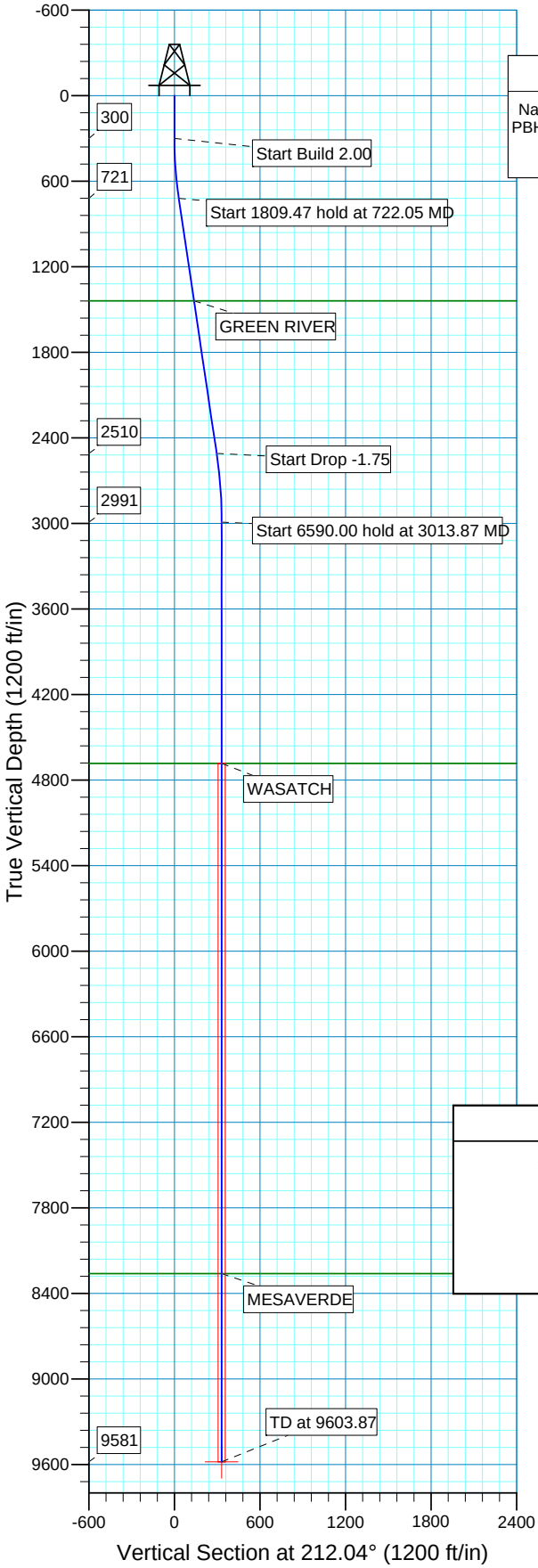
WELL DETAILS: NBU 921-25J4CS

GL 4959' & RKB 14' @ 4973.00ft (ASSUMED) 4959.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14531399.00	2061549.25	40° 0' 17.809 N	109° 29' 46.284 W

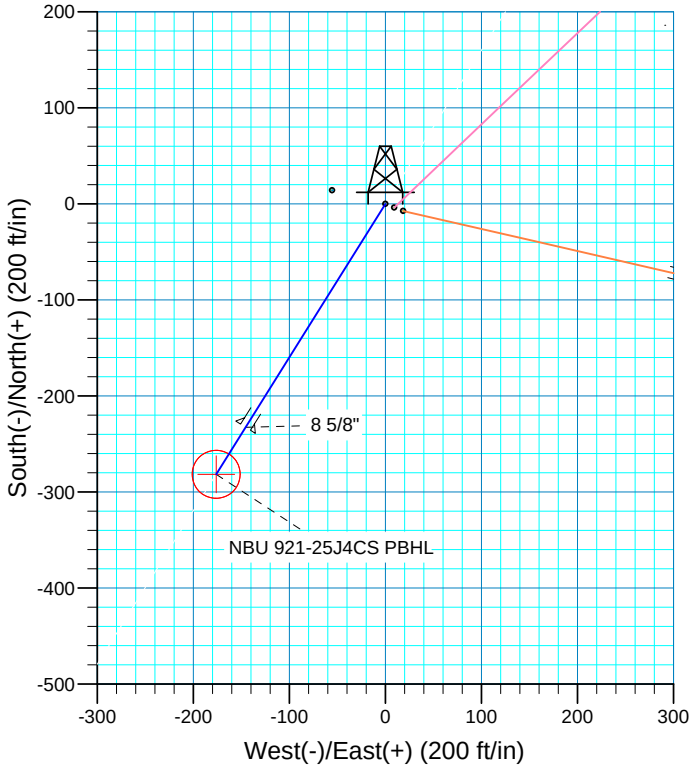
T M
Azimuths to True North
Magnetic North: 11.19°

Magnetic Field
Strength: 52419.8snT
Dip Angle: 65.89°
Date: 07/29/2010
Model: IGRF2010



WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	9581.00	-281.53	-176.18	14531114.53	2061377.84	40° 0' 15.026 N	109° 29' 48.548 W	Circle (Radius: 25.0



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	722.05	8.44	212.04	720.53	-26.31	-16.46	2.00	212.04	31.03	
4	2531.52	8.44	212.04	2510.40	-251.47	-157.37	0.00	0.00	296.65	
5	3013.87	0.00	0.00	2991.00	-281.53	-176.18	1.75	180.00	332.12	
6	9603.87	0.00	0.00	9581.00	-281.53	-176.18	0.00	0.00	332.12	NBU 921-25J4CS PBHL

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1439.00	1448.39	GREEN RIVER
4683.00	4705.87	WASATCH
8261.00	8283.87	MESAVERDE

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 25 T9S R21E
System Datum: Mean Sea Level
Local North: No north reference data is available

Plan: Plan #1 (NBU 921-25J4CS/OH)

Created By: Robert H. Scott Date: 9:56, July 29 2010

'APIWellNo:43047512550000'

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12
NBU 921-25J Pad
NBU 921-25J4CS
OH

Plan: Plan #1

Standard Planning Report

29 July, 2010

Anadarko
Petroleum Corporation

Scientific Drilling
Rocky Mountain Operations

SDI
Planning Report

Anadarko Petroleum Corporation

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project Uintah County, UT UTM12

Map System:	Universal Transverse Mercator (US Survey Fee	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site NBU 921-25J Pad, SEC 25 T9S R21E

Site Position:		**Northing:**	14,531,392.03 ft	**Latitude:**	40° 0' 17.737 N
From:	Lat/Long	**Easting:**	2,061,567.86 ft	**Longitude:**	109° 29' 46.046 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	0.97 °

Well NBU 921-25J4CS, 1886' FSL 1743' FEL

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,531,399.00 ft	**Latitude:**	40° 0' 17.809 N
	+E/-W	0.00 ft	**Easting:**	2,061,549.25 ft	**Longitude:**	109° 29' 46.284 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,959.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/29/2010	11.19	65.90	52,420

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	212.04

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	
722.05	8.44	212.04	720.53	-26.31	-16.46	2.00	2.00	0.00	212.04	
2,531.52	8.44	212.04	2,510.40	-251.47	-157.37	0.00	0.00	0.00	0.00	
3,013.87	0.00	0.00	2,991.00	-281.53	-176.18	1.75	-1.75	0.00	180.00	
9,603.87	0.00	0.00	9,581.00	-281.53	-176.18	0.00	0.00	0.00	0.00	NBU 921-25J4CS F

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
400.00	2.00	212.04	399.98	-1.48	-0.93	1.75	2.00	2.00	0.00
500.00	4.00	212.04	499.84	-5.92	-3.70	6.98	2.00	2.00	0.00
600.00	6.00	212.04	599.45	-13.30	-8.33	15.69	2.00	2.00	0.00
700.00	8.00	212.04	698.70	-23.63	-14.79	27.88	2.00	2.00	0.00
722.05	8.44	212.04	720.53	-26.31	-16.46	31.03	2.00	2.00	0.00
Start 1809.47 hold at 722.05 MD									
800.00	8.44	212.04	797.63	-36.01	-22.53	42.48	0.00	0.00	0.00
900.00	8.44	212.04	896.55	-48.45	-30.32	57.15	0.00	0.00	0.00
1,000.00	8.44	212.04	995.46	-60.89	-38.11	71.83	0.00	0.00	0.00
1,100.00	8.44	212.04	1,094.38	-73.34	-45.89	86.51	0.00	0.00	0.00
1,200.00	8.44	212.04	1,193.30	-85.78	-53.68	101.19	0.00	0.00	0.00
1,300.00	8.44	212.04	1,292.21	-98.22	-61.47	115.87	0.00	0.00	0.00
1,400.00	8.44	212.04	1,391.13	-110.67	-69.26	130.55	0.00	0.00	0.00
1,448.39	8.44	212.04	1,439.00	-116.69	-73.02	137.65	0.00	0.00	0.00
GREEN RIVER									
1,500.00	8.44	212.04	1,490.05	-123.11	-77.04	145.23	0.00	0.00	0.00
1,600.00	8.44	212.04	1,588.96	-135.55	-84.83	159.91	0.00	0.00	0.00
1,700.00	8.44	212.04	1,687.88	-148.00	-92.62	174.59	0.00	0.00	0.00
1,800.00	8.44	212.04	1,786.80	-160.44	-100.40	189.27	0.00	0.00	0.00
1,900.00	8.44	212.04	1,885.71	-172.88	-108.19	203.95	0.00	0.00	0.00
2,000.00	8.44	212.04	1,984.63	-185.33	-115.98	218.63	0.00	0.00	0.00
2,100.00	8.44	212.04	2,083.55	-197.77	-123.76	233.31	0.00	0.00	0.00
2,200.00	8.44	212.04	2,182.46	-210.21	-131.55	247.98	0.00	0.00	0.00
2,300.00	8.44	212.04	2,281.38	-222.66	-139.34	262.66	0.00	0.00	0.00
2,379.48	8.44	212.04	2,360.00	-232.55	-145.53	274.33	0.00	0.00	0.00
8 5/8"									
2,400.00	8.44	212.04	2,380.30	-235.10	-147.13	277.34	0.00	0.00	0.00
2,500.00	8.44	212.04	2,479.22	-247.55	-154.91	292.02	0.00	0.00	0.00
2,531.52	8.44	212.04	2,510.40	-251.47	-157.37	296.65	0.00	0.00	0.00
Start Drop -1.75									
2,600.00	7.24	212.04	2,578.23	-259.39	-162.32	305.99	1.75	-1.75	0.00
2,700.00	5.49	212.04	2,677.61	-268.79	-168.21	317.08	1.75	-1.75	0.00
2,800.00	3.74	212.04	2,777.28	-275.61	-172.48	325.13	1.75	-1.75	0.00
2,900.00	1.99	212.04	2,877.15	-279.85	-175.13	330.14	1.75	-1.75	0.00
3,000.00	0.24	212.04	2,977.13	-281.51	-176.17	332.09	1.75	-1.75	0.00
3,013.87	0.00	0.00	2,991.00	-281.53	-176.18	332.12	1.75	-1.75	0.00
Start 6590.00 hold at 3013.87 MD									
3,100.00	0.00	0.00	3,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,200.00	0.00	0.00	3,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,300.00	0.00	0.00	3,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,400.00	0.00	0.00	3,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,500.00	0.00	0.00	3,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,600.00	0.00	0.00	3,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,700.00	0.00	0.00	3,677.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,800.00	0.00	0.00	3,777.13	-281.53	-176.18	332.12	0.00	0.00	0.00
3,900.00	0.00	0.00	3,877.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,000.00	0.00	0.00	3,977.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,100.00	0.00	0.00	4,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**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	4,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,300.00	0.00	0.00	4,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,400.00	0.00	0.00	4,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,500.00	0.00	0.00	4,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,600.00	0.00	0.00	4,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,700.00	0.00	0.00	4,677.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,705.87	0.00	0.00	4,683.00	-281.53	-176.18	332.12	0.00	0.00	0.00
WASATCH									
4,800.00	0.00	0.00	4,777.13	-281.53	-176.18	332.12	0.00	0.00	0.00
4,900.00	0.00	0.00	4,877.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,000.00	0.00	0.00	4,977.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,100.00	0.00	0.00	5,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,200.00	0.00	0.00	5,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,300.00	0.00	0.00	5,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,400.00	0.00	0.00	5,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,500.00	0.00	0.00	5,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,600.00	0.00	0.00	5,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,700.00	0.00	0.00	5,677.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,800.00	0.00	0.00	5,777.13	-281.53	-176.18	332.12	0.00	0.00	0.00
5,900.00	0.00	0.00	5,877.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,000.00	0.00	0.00	5,977.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,100.00	0.00	0.00	6,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,200.00	0.00	0.00	6,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,300.00	0.00	0.00	6,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,400.00	0.00	0.00	6,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,500.00	0.00	0.00	6,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,600.00	0.00	0.00	6,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,700.00	0.00	0.00	6,677.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,800.00	0.00	0.00	6,777.13	-281.53	-176.18	332.12	0.00	0.00	0.00
6,900.00	0.00	0.00	6,877.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,000.00	0.00	0.00	6,977.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,100.00	0.00	0.00	7,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,200.00	0.00	0.00	7,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,300.00	0.00	0.00	7,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,400.00	0.00	0.00	7,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,500.00	0.00	0.00	7,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,600.00	0.00	0.00	7,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,700.00	0.00	0.00	7,677.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,800.00	0.00	0.00	7,777.13	-281.53	-176.18	332.12	0.00	0.00	0.00
7,900.00	0.00	0.00	7,877.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,000.00	0.00	0.00	7,977.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,100.00	0.00	0.00	8,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,200.00	0.00	0.00	8,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,283.87	0.00	0.00	8,261.00	-281.53	-176.18	332.12	0.00	0.00	0.00
MESAVERDE									
8,300.00	0.00	0.00	8,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,400.00	0.00	0.00	8,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,500.00	0.00	0.00	8,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,600.00	0.00	0.00	8,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,700.00	0.00	0.00	8,677.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,800.00	0.00	0.00	8,777.13	-281.53	-176.18	332.12	0.00	0.00	0.00
8,900.00	0.00	0.00	8,877.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,000.00	0.00	0.00	8,977.13	-281.53	-176.18	332.12	0.00	0.00	0.00

Scientific Drilling
Rocky Mountain Operations

SDI
Planning Report

Anadarko Petroleum Corporation

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**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)
9,100.00	0.00	0.00	9,077.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,200.00	0.00	0.00	9,177.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,300.00	0.00	0.00	9,277.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,400.00	0.00	0.00	9,377.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,500.00	0.00	0.00	9,477.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,600.00	0.00	0.00	9,577.13	-281.53	-176.18	332.12	0.00	0.00	0.00
9,603.87	0.00	0.00	9,581.00	-281.53	-176.18	332.12	0.00	0.00	0.00
NBU 921-25J4CS PBHL									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-25J4CS PB - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,581.00	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,379.48	2,360.00	8 5/8"	8.625	11.000

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,283.87	8,261.00	MESAVERDE			
1,448.39	1,439.00	GREEN RIVER			
4,705.87	4,683.00	WASATCH			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
722.05	720.53	-26.31	-16.46	Start 1809.47 hold at 722.05 MD
2,531.52	2,510.40	-251.47	-157.37	Start Drop -1.75
3,013.87	2,991.00	-281.53	-176.18	Start 6590.00 hold at 3013.87 MD
9,603.87	9,581.00	-281.53	-176.18	TD at 9603.87

'APIWellNo:43047512550000'

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12
NBU 921-25J Pad
NBU 921-25J4CS
OH

Plan: Plan #1

Standard Planning Report - Geographic

29 July, 2010

Anadarko
Petroleum Corporation

Scientific Drilling
Rocky Mountain Operations

SDI
Planning Report - Geographic

Anadarko Petroleum Corporation

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project Uintah County, UT UTM12

Map System:	Universal Transverse Mercator (US Survey Fee	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site NBU 921-25J Pad, SEC 25 T9S R21E

Site Position:		**Northing:**	14,531,392.03 ft	**Latitude:**	40° 0' 17.737 N
From:	Lat/Long	**Easting:**	2,061,567.86 ft	**Longitude:**	109° 29' 46.046 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	0.97 °

Well NBU 921-25J4CS, 1886' FSL 1743' FEL

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,531,399.00 ft	**Latitude:**	40° 0' 17.809 N
	+E/-W	0.00 ft	**Easting:**	2,061,549.25 ft	**Longitude:**	109° 29' 46.284 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,959.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/29/2010	11.19	65.90	52,420

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	212.04

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	
722.05	8.44	212.04	720.53	-26.31	-16.46	2.00	2.00	0.00	212.04	
2,531.52	8.44	212.04	2,510.40	-251.47	-157.37	0.00	0.00	0.00	0.00	
3,013.87	0.00	0.00	2,991.00	-281.53	-176.18	1.75	-1.75	0.00	180.00	
9,603.87	0.00	0.00	9,581.00	-281.53	-176.18	0.00	0.00	0.00	0.00	NBU 921-25J4CS F

Scientific Drilling
Rocky Mountain Operations

SDI
Planning Report - Geographic

Anadarko Petroleum Corporation

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**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 (ft)	Map Easting (ft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,531,399.00	2,061,549.25	40° 0' 17.809 N	109° 29' 46.284 W
100.00	0.00	0.00	100.00	0.00	0.00	14,531,399.00	2,061,549.25	40° 0' 17.809 N	109° 29' 46.284 W
200.00	0.00	0.00	200.00	0.00	0.00	14,531,399.00	2,061,549.25	40° 0' 17.809 N	109° 29' 46.284 W
300.00	0.00	0.00	300.00	0.00	0.00	14,531,399.00	2,061,549.25	40° 0' 17.809 N	109° 29' 46.284 W
Start Build 2.00									
400.00	2.00	212.04	399.98	-1.48	-0.93	14,531,397.50	2,061,548.35	40° 0' 17.795 N	109° 29' 46.296 W
500.00	4.00	212.04	499.84	-5.92	-3.70	14,531,393.02	2,061,545.65	40° 0' 17.751 N	109° 29' 46.332 W
600.00	6.00	212.04	599.45	-13.30	-8.33	14,531,385.56	2,061,541.15	40° 0' 17.678 N	109° 29' 46.391 W
700.00	8.00	212.04	698.70	-23.63	-14.79	14,531,375.12	2,061,534.86	40° 0' 17.576 N	109° 29' 46.474 W
722.05	8.44	212.04	720.53	-26.31	-16.46	14,531,372.42	2,061,533.23	40° 0' 17.549 N	109° 29' 46.496 W
Start 1809.47 hold at 722.05 MD									
800.00	8.44	212.04	797.63	-36.01	-22.53	14,531,362.62	2,061,527.33	40° 0' 17.453 N	109° 29' 46.574 W
900.00	8.44	212.04	896.55	-48.45	-30.32	14,531,350.04	2,061,519.75	40° 0' 17.330 N	109° 29' 46.674 W
1,000.00	8.44	212.04	995.46	-60.89	-38.11	14,531,337.47	2,061,512.18	40° 0' 17.207 N	109° 29' 46.774 W
1,100.00	8.44	212.04	1,094.38	-73.34	-45.89	14,531,324.90	2,061,504.60	40° 0' 17.084 N	109° 29' 46.874 W
1,200.00	8.44	212.04	1,193.30	-85.78	-53.68	14,531,312.32	2,061,497.02	40° 0' 16.961 N	109° 29' 46.974 W
1,300.00	8.44	212.04	1,292.21	-98.22	-61.47	14,531,299.75	2,061,489.45	40° 0' 16.838 N	109° 29' 47.074 W
1,400.00	8.44	212.04	1,391.13	-110.67	-69.26	14,531,287.18	2,061,481.87	40° 0' 16.715 N	109° 29' 47.174 W
1,448.39	8.44	212.04	1,439.00	-116.69	-73.02	14,531,281.09	2,061,478.21	40° 0' 16.656 N	109° 29' 47.223 W
GREEN RIVER									
1,500.00	8.44	212.04	1,490.05	-123.11	-77.04	14,531,274.60	2,061,474.30	40° 0' 16.592 N	109° 29' 47.274 W
1,600.00	8.44	212.04	1,588.96	-135.55	-84.83	14,531,262.03	2,061,466.72	40° 0' 16.469 N	109° 29' 47.374 W
1,700.00	8.44	212.04	1,687.88	-148.00	-92.62	14,531,249.46	2,061,459.14	40° 0' 16.346 N	109° 29' 47.474 W
1,800.00	8.44	212.04	1,786.80	-160.44	-100.40	14,531,236.89	2,061,451.57	40° 0' 16.223 N	109° 29' 47.574 W
1,900.00	8.44	212.04	1,885.71	-172.88	-108.19	14,531,224.31	2,061,443.99	40° 0' 16.100 N	109° 29' 47.675 W
2,000.00	8.44	212.04	1,984.63	-185.33	-115.98	14,531,211.74	2,061,436.42	40° 0' 15.977 N	109° 29' 47.775 W
2,100.00	8.44	212.04	2,083.55	-197.77	-123.76	14,531,199.17	2,061,428.84	40° 0' 15.854 N	109° 29' 47.875 W
2,200.00	8.44	212.04	2,182.46	-210.21	-131.55	14,531,186.59	2,061,421.26	40° 0' 15.731 N	109° 29' 47.975 W
2,300.00	8.44	212.04	2,281.38	-222.66	-139.34	14,531,174.02	2,061,413.69	40° 0' 15.608 N	109° 29' 48.075 W
2,379.48	8.44	212.04	2,360.00	-232.55	-145.53	14,531,164.03	2,061,407.67	40° 0' 15.511 N	109° 29' 48.154 W
8 5/8"									
2,400.00	8.44	212.04	2,380.30	-235.10	-147.13	14,531,161.45	2,061,406.11	40° 0' 15.485 N	109° 29' 48.175 W
2,500.00	8.44	212.04	2,479.22	-247.55	-154.91	14,531,148.87	2,061,398.54	40° 0' 15.362 N	109° 29' 48.275 W
2,531.52	8.44	212.04	2,510.40	-251.47	-157.37	14,531,144.91	2,061,396.15	40° 0' 15.324 N	109° 29' 48.307 W
Start Drop -1.75									
2,600.00	7.24	212.04	2,578.23	-259.39	-162.32	14,531,136.91	2,061,391.33	40° 0' 15.245 N	109° 29' 48.370 W
2,700.00	5.49	212.04	2,677.61	-268.79	-168.21	14,531,127.41	2,061,385.60	40° 0' 15.152 N	109° 29' 48.446 W
2,800.00	3.74	212.04	2,777.28	-275.61	-172.48	14,531,120.51	2,061,381.45	40° 0' 15.085 N	109° 29' 48.501 W
2,900.00	1.99	212.04	2,877.15	-279.85	-175.13	14,531,116.23	2,061,378.86	40° 0' 15.043 N	109° 29' 48.535 W
3,000.00	0.24	212.04	2,977.13	-281.51	-176.17	14,531,114.56	2,061,377.86	40° 0' 15.027 N	109° 29' 48.548 W
3,013.87	0.00	0.00	2,991.00	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
Start 6590.00 hold at 3013.87 MD									
3,100.00	0.00	0.00	3,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,200.00	0.00	0.00	3,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,300.00	0.00	0.00	3,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,400.00	0.00	0.00	3,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,500.00	0.00	0.00	3,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,600.00	0.00	0.00	3,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,700.00	0.00	0.00	3,677.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,800.00	0.00	0.00	3,777.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
3,900.00	0.00	0.00	3,877.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,000.00	0.00	0.00	3,977.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,100.00	0.00	0.00	4,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**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 (ft)	Map Easting (ft)	Latitude	Longitude
4,200.00	0.00	0.00	4,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,300.00	0.00	0.00	4,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,400.00	0.00	0.00	4,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,500.00	0.00	0.00	4,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,600.00	0.00	0.00	4,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,700.00	0.00	0.00	4,677.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,705.87	0.00	0.00	4,683.00	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
WASATCH									
4,800.00	0.00	0.00	4,777.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
4,900.00	0.00	0.00	4,877.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,000.00	0.00	0.00	4,977.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,100.00	0.00	0.00	5,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,200.00	0.00	0.00	5,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,300.00	0.00	0.00	5,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,400.00	0.00	0.00	5,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,500.00	0.00	0.00	5,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,600.00	0.00	0.00	5,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,700.00	0.00	0.00	5,677.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,800.00	0.00	0.00	5,777.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
5,900.00	0.00	0.00	5,877.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,000.00	0.00	0.00	5,977.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,100.00	0.00	0.00	6,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,200.00	0.00	0.00	6,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,300.00	0.00	0.00	6,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,400.00	0.00	0.00	6,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,500.00	0.00	0.00	6,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,600.00	0.00	0.00	6,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,700.00	0.00	0.00	6,677.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,800.00	0.00	0.00	6,777.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
6,900.00	0.00	0.00	6,877.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,000.00	0.00	0.00	6,977.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,100.00	0.00	0.00	7,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,200.00	0.00	0.00	7,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,300.00	0.00	0.00	7,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,400.00	0.00	0.00	7,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,500.00	0.00	0.00	7,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,600.00	0.00	0.00	7,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,700.00	0.00	0.00	7,677.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,800.00	0.00	0.00	7,777.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
7,900.00	0.00	0.00	7,877.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,000.00	0.00	0.00	7,977.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,100.00	0.00	0.00	8,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,200.00	0.00	0.00	8,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,283.87	0.00	0.00	8,261.00	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
MESAVERDE									
8,300.00	0.00	0.00	8,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,400.00	0.00	0.00	8,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,500.00	0.00	0.00	8,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,600.00	0.00	0.00	8,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,700.00	0.00	0.00	8,677.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,800.00	0.00	0.00	8,777.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
8,900.00	0.00	0.00	8,877.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,000.00	0.00	0.00	8,977.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,100.00	0.00	0.00	9,077.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W

Scientific Drilling
Rocky Mountain Operations

SDI
Planning Report - Geographic

Anadarko Petroleum Corporation

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ASSUMED)
Site:	NBU 921-25J Pad	**North Reference:**	True
Well:	NBU 921-25J4CS	**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 (ft)	Map Easting (ft)	Latitude	Longitude
9,200.00	0.00	0.00	9,177.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,300.00	0.00	0.00	9,277.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,400.00	0.00	0.00	9,377.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,500.00	0.00	0.00	9,477.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,600.00	0.00	0.00	9,577.13	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
9,603.87	0.00	0.00	9,581.00	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W
NBU 921-25J4CS PBHL									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 921-25J4CS PB - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,581.00	-281.53	-176.18	14,531,114.53	2,061,377.84	40° 0' 15.026 N	109° 29' 48.548 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,379.48	2,360.00	8 5/8"	8.625	11.000

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,283.87	8,261.00	MESAVERDE			
1,448.39	1,439.00	GREEN RIVER			
4,705.87	4,683.00	WASATCH			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
722.05	720.53	-26.31	-16.46	Start 1809.47 hold at 722.05 MD
2,531.52	2,510.40	-251.47	-157.37	Start Drop -1.75
3,013.87	2,991.00	-281.53	-176.18	Start 6590.00 hold at 3013.87 MD
9,603.87	9,581.00	-281.53	-176.18	TD at 9603.87

NBU 921-25J1DS
Surface: 1,882’ FSL 1,734’ FEL (NW/4SE/4)
BHL: 2,218’ FSL 1,381’ FEL (NW/4SE/4)

NBU 921-25J4AS
Surface: 1,878’ FSL 1,725’ FEL (NW/4SE/4)
BHL: 1,795’ FSL 1,360’ FEL (NW/4SE/4)

NBU 921-25J4CS
Surface: 1,886’ FSL 1,743’ FEL (NW/4SE/4)
BHL: 1,604’ FSL 1,920’ FEL (NW/4SE/4)

Pad: NBU 921-25J4
Section 25 T9S R21E
Mineral Lease: UO 1194 ST

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 ±210' (0.04 miles) of road re-route to this pad location 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 235, which is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of August 12, 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 ±2,560' and the individual segments are broken up as follows:

- ±740' (0.1 miles) –New 6" buried gas pipeline from the meter to the edge of the pad.
- ±310' (0.1 miles) –New 6" buried gas pipeline from the edge of pad to the NBU 921-25I pad intersection.
- ±890' (0.2 miles) –New 8" buried gas pipeline from the NBU 921-25I pad intersection to the NBU 921-25P pad intersection.
- ±620' (0.1 miles) –New 10" buried gas pipeline from the NBU 921-25P pad intersection to the NBU 921-25N pad intersection.

The total liquid gathering pipeline distance from the meter to the tie in point is ±2,560' and the individual segments are broken up as follows:

±740' (0.1 miles) –New 4" buried liquid pipeline from the meter to the edge of the pad.

±1,820' (0.3 miles) –New 4" buried liquid pipeline from the edge of pad to the NBU 921-25N pad intersection.

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. <u>Location and Type of Water Supply</u>:

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

'APIWellNo:43047512550000'

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-

'APIWellNo:43047512550000'

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:

A Class I literature survey has been conducted by Montgomery Archaeological Consultants, Inc. (MOAC) For additional details please refer to report MOAC 10-141.

A paleontological reconnaissance has been completed by Intermountain Paleo-Consulting (IPC) and a report will be provided under separate cover.

A biological field survey was completed by Grasslands Consulting, Inc. on July 13, 2010. For additional details please refer to report GCI-296.

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
Danielle Piernot

August 13, 2010
Date

'APIWellNo:43047512550000'

' A P I W e l l N o : 4 3 0 4 7 5 1 2 5 5 0 0 0 0 '

Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237

(303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report Number: GCI #296

Report Date: Original report created August 03, 2010. Revised to include new pad on August 09, 2010

Operator: Kerr-McGee Oil & Gas Onshore LP

Well: NBU 921-25J4 well pad (Bores: NBU 921-25J1DS, NBU 921-25J4AS, & NBU 921-25J4CS)

Pipeline: Associated pipeline leading to proposed well pad

Access Road: Associated road leading to proposed well pad

Location: Section 25, Township 9 South, Range 21 East; Uintah County, Utah

Survey-Species: Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Survey Date: July 13, 2010

Observers: Grasslands Consulting, Inc. Biologists: Brad Snopek, Jennie Sinclair, Jonathan Sexauer, Adrienne Cunningham, Garrett Peterson and field technicians.

'APIWellNo:43047512550000'

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S PROPOSED NBU 921-25B3AS, NBU 921-25B3DS, NBU 921-25C2DS, NBU 921-25C3AS, NBU 921-25J1DS, NBU 921-25J4AS, AND NBU 921-25J4CS WELL LOCATIONS IN T9S, R21E, SECTION 25 (MOAC Report No. 10-141) UINTAH COUNTY, UTAH

By:

Nicole Shelnut

Prepared For:

State of Utah
School and Institutional Trust Lands Administration
and
Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 10-141

August 12, 2010

State of Utah Public Lands Policy Coordination Office
Permit No. 117

United States Department of Interior (FLPMA)
Permit No. 10-UT-60122

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

July 15, 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 921-25J4CS
T9S-R21E
Section 25: NWSE surface and bottom hole
Surface: 1886' FSL, 1743' FEL
Bottom Hole: 1604' FSL, 1920' 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 921-25J4CS 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

Joe Matney
Sr. Staff Landman

'API WellNo:43047512550000'

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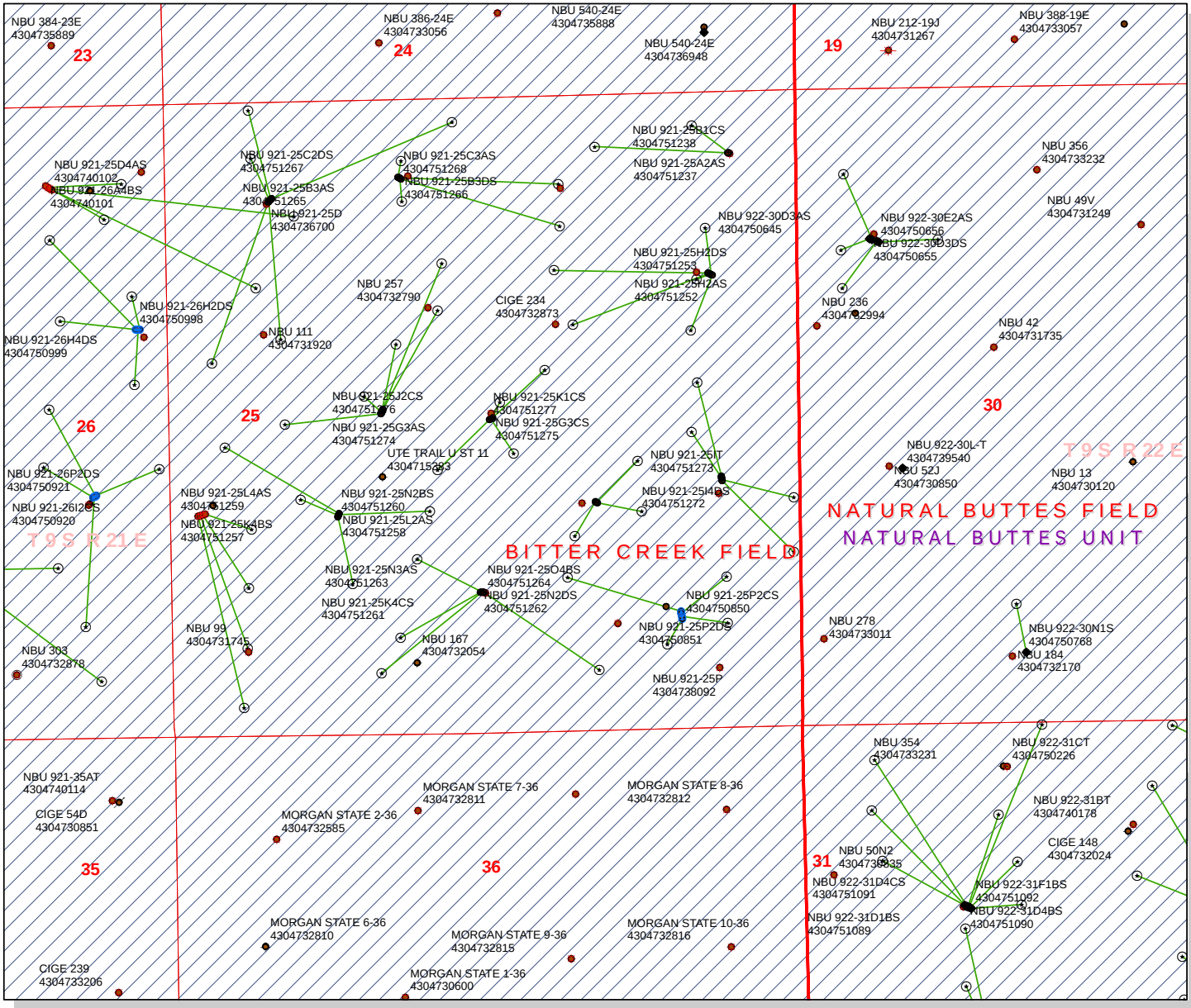


API Number: 4304751255

Well Name: NBU 921-25J4CS

Township 09.0 S Range 21.0 E Section 25

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason

Units

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

Fields
- Sections
- Township
- Bottom Hole Location - AGRC

Wells Query
- <all other values>

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

1,100 550 0 1,100 Feet

1:10,249

'APIWellNo:43047512550000'

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)

August 17, 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

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25A Pad

43-047-51237 NBU 921-25A2AS Sec 25 T09S R21E 0489 FNL 0565 FEL
BHL Sec 25 T09S R21E 0252 FNL 0865 FEL

43-047-51238 NBU 921-25B1CS Sec 25 T09S R21E 0489 FNL 0575 FEL
BHL Sec 25 T09S R21E 0416 FNL 1676 FEL

NBU 921-25D Pad

43-047-51239 NBU 921-25C1AS Sec 25 T09S R21E 0800 FNL 0893 FWL
BHL Sec 25 T09S R21E 0190 FNL 2405 FWL

43-047-51240 NBU 921-25D1BS Sec 25 T09S R21E 0807 FNL 0885 FWL
BHL Sec 25 T09S R21E 0060 FNL 0716 FWL

43-047-51241 NBU 921-25E1CS Sec 25 T09S R21E 0821 FNL 0871 FWL
BHL Sec 25 T09S R21E 1976 FNL 0947 FWL

43-047-51242 NBU 921-25E3AS Sec 25 T09S R21E 0828 FNL 0864 FWL
BHL Sec 25 T09S R21E 2162 FNL 0371 FWL

43-047-51251 NBU 921-25D1CS Sec 25 T09S R21E 0814 FNL 0878 FWL
BHL Sec 25 T09S R21E 0460 FNL 0726 FWL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25F Pad

43-047-51243 NBU 921-25F1BS Sec 25 T09S R21E 2580 FNL 1780 FWL
BHL Sec 25 T09S R21E 1366 FNL 2296 FWL

43-047-51244 NBU 921-25F1CS Sec 25 T09S R21E 2571 FNL 1784 FWL
BHL Sec 25 T09S R21E 1754 FNL 2259 FWL

43-047-51245 NBU 921-25F3AS Sec 25 T09S R21E 2589 FNL 1776 FWL
BHL Sec 25 T09S R21E 2034 FNL 1905 FWL

43-047-51246 NBU 921-25F3CS Sec 25 T09S R21E 2598 FNL 1772 FWL
BHL Sec 25 T09S R21E 2461 FNL 1628 FWL

43-047-51247 NBU 921-25L1BS Sec 25 T09S R21E 2607 FNL 1768 FWL
BHL Sec 25 T09S R21E 2597 FSL 0969 FWL

NBU 921-25H Pad

43-047-51248 NBU 921-25A3DS Sec 25 T09S R21E 1498 FNL 0736 FEL
BHL Sec 25 T09S R21E 1110 FNL 0776 FEL

43-047-51249 NBU 921-25G1CS Sec 25 T09S R21E 1489 FNL 0754 FEL
BHL Sec 25 T09S R21E 1895 FNL 1893 FEL

43-047-51250 NBU 921-25G2AS Sec 25 T09S R21E 1484 FNL 0763 FEL
BHL Sec 25 T09S R21E 1439 FNL 2042 FEL

43-047-51252 NBU 921-25H2AS Sec 25 T09S R21E 1493 FNL 0745 FEL
BHL Sec 25 T09S R21E 1538 FNL 0857 FEL

43-047-51253 NBU 921-25H2DS Sec 25 T09S R21E 1502 FNL 0727 FEL
BHL Sec 25 T09S R21E 1958 FNL 0913 FEL

NBU 921-25J Pad

43-047-51254 NBU 921-25J4AS Sec 25 T09S R21E 1878 FSL 1725 FEL
BHL Sec 25 T09S R21E 1795 FSL 1360 FEL

43-047-51255 NBU 921-25J4CS Sec 25 T09S R21E 1886 FSL 1743 FEL
BHL Sec 25 T09S R21E 1604 FSL 1920 FEL

43-047-51256 NBU 921-25J1DS Sec 25 T09S R21E 1882 FSL 1734 FEL
BHL Sec 25 T09S R21E 2218 FSL 1381 FEL

NBU 921-25K Pad

43-047-51257 NBU 921-25K4BS Sec 25 T09S R21E 1838 FSL 1400 FWL
BHL Sec 25 T09S R21E 1848 FSL 2161 FWL

43-047-51258 NBU 921-25L2AS Sec 25 T09S R21E 1848 FSL 1402 FWL
BHL Sec 25 T09S R21E 2423 FSL 0465 FWL

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

43-047-51259 NBU 921-25L4AS Sec 25 T09S R21E 1829 FSL 1397 FWL
BHL Sec 25 T09S R21E 1975 FSL 1088 FWL

43-047-51260 NBU 921-25N2BS Sec 25 T09S R21E 1819 FSL 1394 FWL
BHL Sec 25 T09S R21E 1260 FSL 1508 FWL

NBU 921-25N Pad

43-047-51261 NBU 921-25K4CS Sec 25 T09S R21E 1157 FSL 2585 FWL
BHL Sec 25 T09S R21E 1450 FSL 2045 FWL

43-047-51262 NBU 921-25N2DS Sec 25 T09S R21E 1159 FSL 2565 FWL
BHL Sec 25 T09S R21E 0800 FSL 1896 FWL

43-047-51263 NBU 921-25N3AS Sec 25 T09S R21E 1158 FSL 2575 FWL
BHL Sec 25 T09S R21E 0508 FSL 1729 FWL

43-047-51264 NBU 921-25O4BS Sec 25 T09S R21E 1156 FSL 2595 FWL
BHL Sec 25 T09S R21E 0485 FSL 1741 FEL

NBU 921-25C Pad

43-047-51265 NBU 921-25B3AS Sec 25 T09S R21E 0645 FNL 1955 FWL
BHL Sec 25 T09S R21E 0720 FNL 1985 FEL

43-047-51266 NBU 921-25B3DS Sec 25 T09S R21E 0654 FNL 1972 FWL
BHL Sec 25 T09S R21E 1070 FNL 1985 FEL

43-047-51267 NBU 921-25C2DS Sec 25 T09S R21E 0640 FNL 1946 FWL
BHL Sec 25 T09S R21E 0504 FNL 1975 FWL

43-047-51268 NBU 921-25C3AS Sec 25 T09S R21E 0650 FNL 1964 FWL
BHL Sec 25 T09S R21E 0841 FNL 1975 FWL

NBU 921-25I Pad

43-047-51269 NBU 921-25H3DS Sec 25 T09S R21E 2074 FSL 0690 FEL
BHL Sec 25 T09S R21E 2395 FNL 0870 FEL

43-047-51270 NBU 921-25I2AS Sec 25 T09S R21E 2054 FSL 0687 FEL
BHL Sec 25 T09S R21E 2445 FSL 0924 FEL

43-047-51271 NBU 921-25I4AS Sec 25 T09S R21E 2045 FSL 0686 FEL
BHL Sec 25 T09S R21E 1882 FSL 0091 FEL

43-047-51272 NBU 921-25I4DS Sec 25 T09S R21E 2035 FSL 0684 FEL
BHL Sec 25 T09S R21E 1420 FSL 0105 FEL

43-047-51273 NBU 921-25IT Sec 25 T09S R21E 2064 FSL 0689 FEL
BHL Sec 25 T09S R21E 2064 FSL 0689 FEL

API #	WELL NAME	LOCATION

(Proposed PZ WASATCH-MESA VERDE)

NBU 921-25J2 Pad

43-047-51274 NBU 921-25G3AS Sec 25 T09S R21E 2611 FSL 2578 FEL
BHL Sec 25 T09S R21E 2265 FNL 2136 FEL

43-047-51275 NBU 921-25G3CS Sec 25 T09S R21E 2606 FSL 2587 FEL
BHL Sec 25 T09S R21E 2530 FNL 2518 FEL

43-047-51276 NBU 921-25J2CS Sec 25 T09S R21E 2601 FSL 2596 FEL
BHL Sec 25 T09S R21E 2310 FSL 2410 FEL

43-047-51277 NBU 921-25K1CS Sec 25 T09S R21E 2596 FSL 2605 FEL
BHL Sec 25 T09S R21E 2186 FSL 2231 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: 2010.08.17 14:58:46 -06'00'

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

MCoulthard:mc:8-17-10

'APIWellNo:43047512550000'

From: Jim Davis
To: Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana
CC: Bartlett, Floyd; Laura.Gianakos@anadarko.com; Piernot, Danielle; Upch...
Date: 9/2/2010 9:13 AM
Subject: SITLA approval of Kerr McGee wells
Attachments: KMG approvals and paleo 9.1.2010.xlsx

The following wells have been approved by SITLA including arch clearance. Paleo clearance is also granted with stipulations as noted.

Full Paleo monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist.

NBU 922-29F4DS [API #4304751207]	Full Monitoring	IPC 10-08
NBU 922-29G4CS [API #4304751208]	Full Monitoring	IPC 10-08
NBU 922-29J4BS [API #4304751209]	Full Monitoring	IPC 10-08
NBU 922-29K1DS [API #4304751210]	Full Monitoring	IPC 10-08
NBU 922-29G1AS [API #4304751194]	Full Monitoring	IPC 10-06
NBU 922-29G1DS [API #4304751195]	Full Monitoring	IPC 10-06
NBU 922-29G2BS [API #4304751196]	Full Monitoring	IPC 10-06
NBU 922-29G3BS [API #4304751197]	Full Monitoring	IPC 10-06
NBU 921-25A3DS [API 4304751248]	Full Monitoring	IPC 10-21
NBU 921-25G1CS [API 4304751249]	Full Monitoring	IPC 10-21
NBU 921-25G2AS [API 4304751250]	Full Monitoring	IPC 10-21
NBU 921-25H2AS [API 4304751252]	Full Monitoring	IPC 10-21
NBU 921-25H2DS [API 4304751253]	Full Monitoring	IPC 10-21
NBU 921-25G3AS [API 4304751274]	Full Monitoring	IPC 10-23
NBU 921-25G3CS [API 4304751275]	Full Monitoring	IPC 10-23
NBU 921-25J2CS [API 4304751276]	Full Monitoring	IPC 10-23
NBU 921-25K1CS [API 4304751277]	Full Monitoring	IPC 10-23
NBU 921-25A2AS [API 4304751237]	Full Monitoring	IPC 10-21
NBU 921-25B1CS [API 4304751238]	Full Monitoring	IPC 10-21

Spot Paleo Monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist at the beginning of construction and thereafter spot-monitored as paleontological conditions merit.

NBU 921-25C1AS [API 4304751239]	Spot Monitoring	IPC 10-20
NBU 921-25D1BS [API 4304751240]	Spot Monitoring	IPC 10-20
NBU 921-25D1CS [API 4304751251]	Spot Monitoring	IPC 10-20
NBU 921-25E1CS [API 4304751241]	Spot Monitoring	IPC 10-20
NBU 921-25E3AS [API 4304751242]	Spot Monitoring	IPC 10-20
NBU 921-25F1BS [API 4304751243]	Spot Monitoring	IPC 10-21
NBU 921-25F1CS [API 4304751244]	Spot Monitoring	IPC 10-21
NBU 921-25F3AS [API 4304751245]	Spot Monitoring	IPC 10-21
NBU 921-25F3CS [API 4304751246]	Spot Monitoring	IPC 10-21
NBU 921-25L1BS [API 4304751247]	Spot Monitoring	IPC 10-21
NBU 921-25J1DS [API 4304751256]	Spot Monitoring	IPC 10-23
NBU 921-25J4AS [API 4304751254]	Spot Monitoring	IPC 10-23
NBU 921-25J4CS [API 4304751255]	Spot Monitoring	IPC 10-23
NBU 921-25K4BS [API 4304751257]	Spot Monitoring	IPC 10-22
NBU 921-25L2AS [API 4304751258]	Spot Monitoring	IPC 10-22
NBU 921-25L4AS [API 4304751259]	Spot Monitoring	IPC 10-22
NBU 921-25N2BS [API 4304751260]	Spot Monitoring	IPC 10-22
NBU 921-25K4CS [API 4304751261]	Spot Monitoring	IPC 10-23
NBU 921-25N2DS [API 4304751262]	Spot Monitoring	IPC 10-23
NBU 921-25N3AS [API 4304751263]	Spot Monitoring	IPC 10-23

'APIWellNo:43047512550000'

NBU 921-25O4BS [API 4304751264] Spot Monitoring IPC 10-23
NBU 921-25B3AS [API 4304751265] Spot Monitoring IPC 10-20
NBU 921-25B3DS [API 4304751266] Spot Monitoring IPC 10-20
NBU 921-25C2DS [API 4304751267] Spot Monitoring IPC 10-20
NBU 921-25C3AS [API 4304751268] Spot Monitoring IPC 10-20
NBU 921-25IT [API 4304751273] Spot Monitoring IPC 10-23
NBU 921-25H3DS [API 4304751269] Spot Monitoring IPC 10-23
NBU 921-25I2AS [API 4304751270] Spot Monitoring IPC 10-23
NBU 921-25I4AS [API 4304751271] Spot Monitoring IPC 10-23
NBU 921-25I4DS [API 4304751272] Spot Monitoring IPC 10-23
NBU 922-29A1BS [API #4304751183] Spot Monitoring IPC 10-06
NBU 922-29A1CS [API #4304751184] Spot Monitoring IPC 10-06
NBU 922-29A4CS [API #4304751185] Spot Monitoring IPC 10-06
NBU 922-29H1BS [API #4304751186] Spot Monitoring IPC 10-06
NBU 922-29B2CS [API #4304751187] Spot Monitoring IPC 10-06

NBU 922-29B4AS [API #4304751188] Spot Monitoring IPC 10-06 (SITLA surf/ Fed Min)
NBU 922-29C2AS [API #4304751189] Spot Monitoring IPC 10-06 (SITLA surf/ Fed Min)

NBU 922-29C4AS [API #4304751190] Spot Monitoring IPC 10-06
NBU 922-29B1AS [API #4304751191] Spot Monitoring IPC 10-06
NBU 922-29B1DS [API #4304751192] Spot Monitoring IPC 10-06
NBU 922-29B2BS [API #4304751193] Spot Monitoring IPC 10-06
NBU 922-29D4DS [API #4304751198] Spot Monitoring IPC 10-05
NBU 922-29E3BS [API #4304751199] Spot Monitoring IPC 10-05
NBU 922-29F3AS [API #4304751200] Spot Monitoring IPC 10-05
NBU 922-29F3BS [API #4304751201] Spot Monitoring IPC 10-05
NBU 922-29G4AS [API #4304751202] Spot Monitoring IPC 10-06
NBU 922-29H1CS [API #4304751203] Spot Monitoring IPC 10-06
NBU 922-29H4CS [API #4304751204] Spot Monitoring IPC 10-06
NBU 922-29I1BS [API #4304751205] Spot Monitoring IPC 10-06
NBU 922-29I1CS [API #4304751206] Spot Monitoring IPC 10-06
NBU 922-29K2CS [API #4304751211] Spot Monitoring IPC 10-07
NBU 922-29K4AS [API #4304751212] Spot Monitoring IPC 10-07
NBU 922-29L1AS [API #4304751213] Spot Monitoring IPC 10-07
NBU 922-29L2BS [API #4304751214] Spot Monitoring IPC 10-07
NBU 922-29L2CS [API #4304751215] Spot Monitoring IPC 10-07
NBU 922-29L3CS [API #4304751216] Spot Monitoring IPC 10-07
NBU 922-29M2AS [API #4304751217] Spot Monitoring IPC 10-07
NBU 922-29N2BS [API #4304751218] Spot Monitoring IPC 10-07
NBU 922-29N3BS [API #4304751219] Spot Monitoring IPC 10-07

NBU 922-30I4BS [API #4304751220] Spot Monitoring IPC 10-07 (SITLA surf/ Fed Min)
NBU 922-30I4CS [API #4304751221] Spot Monitoring IPC 10-07 (SITLA surf/Fed Min)

NBU 922-29J4CS [API #4304751222] Spot Monitoring IPC 10-08
NBU 922-29N1BS [API #4304751223] Spot Monitoring IPC 10-08
NBU 922-29O1CS [API #4304751224] Spot Monitoring IPC 10-08

That's quite a list, so I'm attaching a quick-and-dirty spreadsheet of the same data. This may be helpful to some of you.

Thanks.
-Jim

'APIWellNo:43047512550000'

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

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-25J4CS 43047512550000

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 921-25J4CS 4304751255			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2360	9581		
Previous Shoe Setting Depth (TVD)	40	2360		
Max Mud Weight (ppg)	8.3	12.4		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	6036	12.1		

Calculations	Surf String	8.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	1022		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	739	NO	air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	503	NO	OK
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	512	NO	Reasonable depth in area
Required Casing/BOPE Test Pressure=		2360	psi	
***Max Pressure Allowed @ Previous Casing Shoe=**		40	psi *Assumes 1psi/ft frac gradient	

Calculations	Prod String	4.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	6178		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5028	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4070	YES	OK
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4589	NO	Reasonable
Required Casing/BOPE Test Pressure=		5000	psi	
***Max Pressure Allowed @ Previous Casing Shoe=**		2360	psi *Assumes 1psi/ft frac gradient	

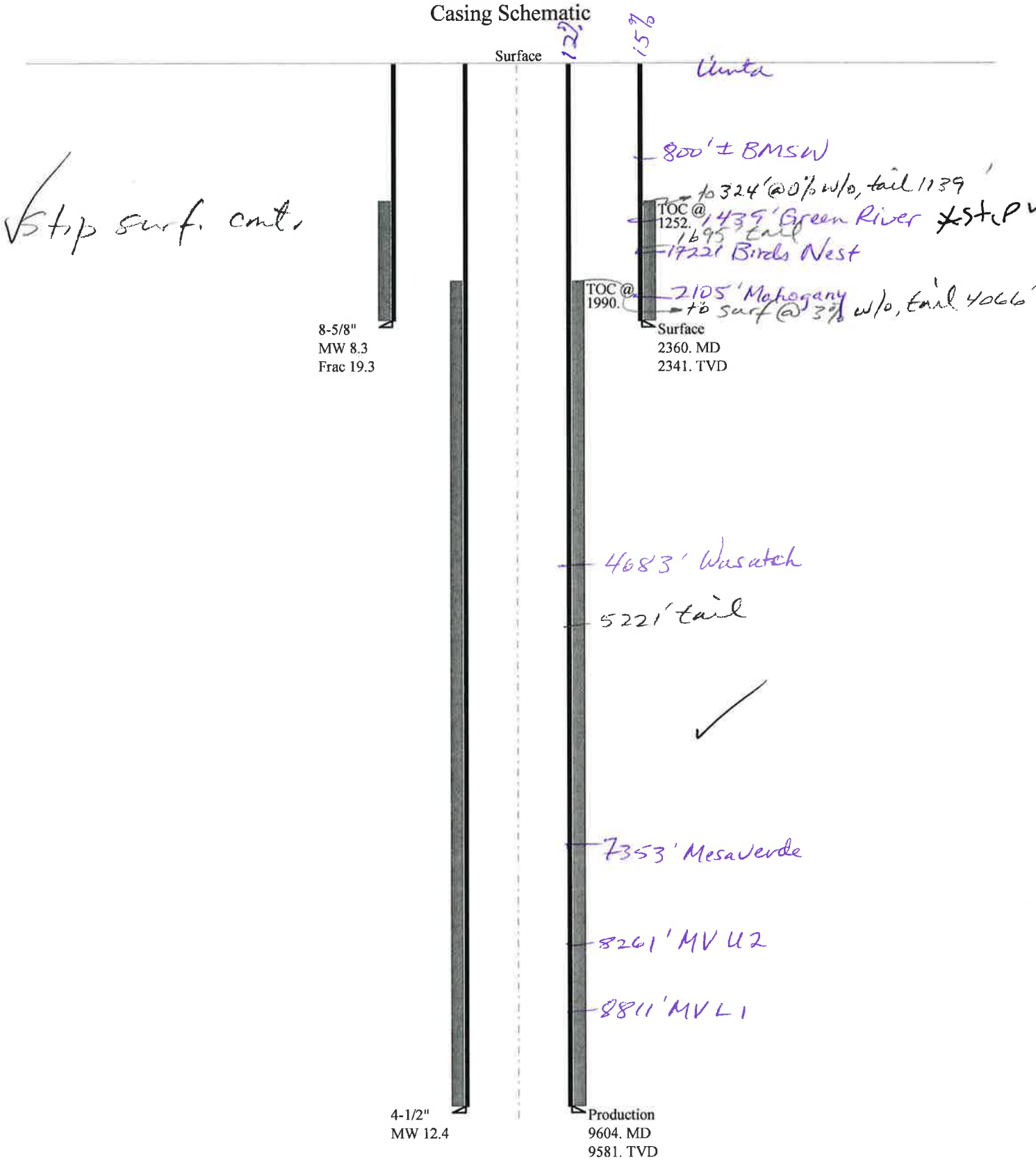
Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure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

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

'APIWellNo:43047512550000'

43047512550000 NBU 921-25J4CS

Casing Schematic



Stop surf. cmt.

'APIWellNo:43047512550000'

Well name:	**43047512550000 NBU 921-25J4CS**
Operator:	**KERR-MCGEE OIL & GAS ONSHORE, L.P.**
String type:	Surface
Project ID:	43-047-51255
Location:	UINTAH COUNTY

Design parameters:

Collapse

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

Burst

Max anticipated surface pressure: 1,227 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,508 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC:	1.80 (J)
8 Round LTC:	1.70 (J)
Buttress:	1.60 (J)
Premium:	1.50 (J)
Body yield:	1.50 (B)

Tension is based on air weight.
Neutral point: 2,069 ft

Environment:

H2S considered?	No
Surface temperature:	74 °F
Bottom hole temperature:	107 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	100 ft
Cement top:	1,252 ft

Directional Info - Build & Hold

Kick-off point	300 ft
Departure at shoe:	271 ft
Maximum dogleg:	2 °/100ft
Inclination at shoe:	8.44 °

Re subsequent strings:

Next setting depth:	2,341 ft
Next mud weight:	12.400 ppg
Next setting BHP:	1,508 psi
Fracture mud wt:	19.250 ppg
Fracture depth:	2,360 ft
Injection pressure:	2,360 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	2360	8.625	28.00	I-55	LT&C	2341	2360	7.892	93456

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	1013	1880	1.856	1508	3390	2.25	65.5	348	5.31 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: October 7,2010
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2341 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

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

'APIWellNo:43047512550000'

Well name:	**43047512550000 NBU 921-25J4CS**
Operator:	**KERR-MCGEE OIL & GAS ONSHORE, L.P.**
String type:	Production
Project ID:	43-047-51255
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight:	12.400 ppg
Internal fluid density:	2.330 ppg

Burst

Max anticipated surface pressure:	4,064 psi
Internal gradient:	0.220 psi/ft
Calculated BHP	6,172 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor	1.125

Burst:

Design factor	1.00

Tension:

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

Tension is based on air weight.
Neutral point: 7,828 ft

Environment:

H2S considered?	No
Surface temperature:	74 °F
Bottom hole temperature:	208 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	100 ft
Cement top:	1,990 ft

Directional Info - Build & Drop

Kick-off point	300 ft
Departure at shoe:	332 ft
Maximum dogleg:	2 °/100ft
Inclination at shoe:	0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	9604	4.5	11.60	I-80	LT&C	9581	9604	3.875	126771

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	5012	6360	1.269	6172	7780	1.26	111.1	212	1.91 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: October 7,2010
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 9581 ft, a mud weight of 12.4 ppg An internal gradient of .121 psi/ft was used for collapse from TD
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

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

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

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

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.				
Well Name	NBU 921-25J4CS				
API Number	43047512550000	**APD No**	2941	**Field/Unit**	NATURAL BUTTES
Location: 1/4,1/4	NWSE **Sec** 25 **Tw** 9.0S **Rng** 21.0E 1886 FSL 1743 FEL				
GPS Coord (UTM)	628367 4429179	**Surface Owner**			

Participants

Floyd Bartlett (DOGM), Sheila Wopsock, Clay Einerson, Roger Perry, Laura Gianokas, Lovel Young, Grizz Oleen, (Kerr McGee), Mitch.Batty, John Slaugh, (Timberline Engineering and Land Surveying), Ed Bonner (SITLA), Ben Williams (UDWR).

Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.9 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or 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 921-25J4 pad will be created by enlarging the existing pad of the CIGE 235 gas well. Three gas wells, to be directionally drilled, will be added. They are the NBU 921-25J4CS, 921-25J1DS and 921-25J4AS. The existing pad will be extended in all directions except to the west. The site is in moderately gentle rolling terrain. Location Corner 10 will be rounded and the drainage diverted around the pad. A small ridge exists to the northwest of the site. The White River is approximately 3 1/2 miles down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the best 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** 425	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 shadscale, curly mesquite, broom snakeweed and halogeton..

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

Soil Type and Characteristics

Surface soils are shallow sandy rocky loam.

Erosion Issues N

Sedimentation Issues Y

Site Stability Issues N

Drainage Diverson Required? Y

Location Corner 10 will be rounded and the drainage diverted around the pad.

Berm Required? N

Erosion Sedimentation Control Required? Y

Location Corner 10 will be rounded and the drainage diverted around the pad.

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

Reserve Pit

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

Characteristics / Requirements

The proposed reserve pit is 125’ x 260’ x 12’ deep located in a cut on the southeast side 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	8/26/2010
Evaluator	**Date / Time**

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2941	43047512550000	LOCKED	GW	S	No

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.	**Surface Owner-APD**	
Well Name	NBU 921-25J4CS	**Unit**	NATURAL BUTTES
Field	NATURAL BUTTES	**Type of Work**	DRILL

Location NWSE 25 9S 21E S 1886 FSL 1743 FEL GPS Coord (UTM) 628368E 4429186N

Geologic Statement of Basis

Kerr McGee proposes to set 2,360' 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 800'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 25. 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	9/29/2010
APD Evaluator	**Date / Time**

Surface Statement of Basis

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 34 air miles and 42.9 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or 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 921-25J4 pad will be created by enlarging the existing pad of the CIGE 235 gas well. Three gas wells, to be directionally drilled, will be added. They are the NBU 921-25J4CS, 921-25J1DS and 921-25J4AS. The existing pad will be extended in all directions except to the west. The site is in moderately gentle rolling terrain. Location Corner 10 will be rounded and the drainage diverted around the pad. A small ridge exists to the northwest of the site. The White River is approximately 3 1/2 miles down drainage. The selected site appears to be suitable for enlarging a pad, drilling and operating the proposed wells and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA. Ed Bonner represented SITLA at the pre-site investigation. Mr. Bonner had no concerns pertaining to this location. SITLA will provide site reclamation standards and a seed mix.

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	8/26/2010
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Application for Permit to Drill
Statement of Basis

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	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/13/2010 **API NO. ASSIGNED:** 43047512550000

WELL NAME: NBU 921-25J4CS

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NWSE 25 090S 210E **Permit Tech Review:** ✔

SURFACE: 1886 FSL 1743 FEL **Engineering Review:** ✔

BOTTOM: 1604 FSL 1920 FEL **Geology Review:** ✔

COUNTY: UINTAH

LATITUDE: 40.00500 **LONGITUDE:** -109.49612

UTM SURF EASTINGS: 628368.00 **NORTHINGS:** 4429186.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: UO 1194 ST **PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

SURFACE OWNER: 3 - State **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ✔ **PLAT**
- ✔ **Bond:** STATE/FEE - 22013542
- ☐ **Potash**
- ✔ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ✔ **Water Permit:** 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 921-25J4CS
API Well Number: 43047512550000
Lease Number: UO 1194 ST
Surface Owner: STATE
Approval Date: 10/13/2010

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.

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

Surface casing shall be cemented to the surface.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:
- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
- Within 24 hours following the spudding of the well – contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at 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

API Well No: 43047512550000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST

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 921-25J4CS

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

9. API NUMBER: 43047512550000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779
PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1886 FSL 1743 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 25 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		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT Date of Spud: 11/22/2010	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.
RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX.
SPUD WELL LOCATION ON NOVEMBER 22, 2010 AT 14:00 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
11/30/2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 11/23/2010

RECEIVED November 23, 2010

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

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address: P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: (720) 929-6100

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751254	NBU 921-25J4AS		NWSE	25	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	11/22/2010			11/29/10	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/22/2010 AT 10:00 HRS. BHL = NWSE

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751256	NBU 921-25J1DS		NWSE	25	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	11/22/2010			11/29/10	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/22/2010 AT 12:00 HRS. BHL = NWSE

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751255	NBU 921-25J4CS		NWSE	25	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
B	99999	2900	11/22/2010			11/29/10	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 11/22/2010 AT 14:00 HRS. BHL = NWSE

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)

ANDY LYTLE
Name (Please Print)

Signature

REGULATORY ANALYST
Title

11/23/2010
Date

RECEIVED
NOV 23 2010
DIV. OF OIL, GAS & MINING

(5/2000)

API Well No: 43047512550000

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST

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 921-25J4CS

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

9. API NUMBER: 43047512550000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6007 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1886 FSL 1743 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 25 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		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 1/1/2011	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

MIRU CAPSTAR AIR RIG ON DECEMBER 30, 2010. DRILLED 11" SURFACE HOLE TO 2610'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 25 BBLS FRESH WATER. PUMP 200 SX CLASS G PREM @ 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 225 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YD. DROP PLUG AND DISPLACED W/ 158 BBLS WATER. BUMP PLUG W/ 1390 PSI. FLOATS HELD W/ 2 BBLS BACK TO TRUCK - 35 BBLS CEMENT TO SURFACE. TOP OUT W/ 35 SX SAME CEMENT. WORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
01/03/2011

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE N/A		**DATE** 1/3/2011

RECEIVED January 03, 2011

API Well No: 43047512550000

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST

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 921-25J4CS

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

9. API NUMBER: 43047512550000

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: 1886 FSL 1743 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 25 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		
✓ NOTICE OF INTENT Approximate date work will start: 1/24/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	✓ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests to change the total depth (TD) to include the Blackhawk formation, which is in the Mesaverde group for this well. Please see the attached for additional details. All of the original information remains the same. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 01/24/2011

By: Dark Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst

SIGNATURE	DATE
N/A	1/24/2011

RECEIVED January 24, 2011

Well name:	**43047512550000 NBU 921-25J4CSrev.**
Operator:	**Kerr McGee Oil & Gas Onshore L.P.**
String type:	Production
Project ID:	43-047-51255-0000
Location:	Uintah County, Utah

Design parameters:

Collapse

Mud weight: 13.000 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 4,840 psi → SurBOPE proposed ✓

Internal gradient: 0.220 psi/ft

Calculated BHP 7,179 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on buoyed weight.

Neutral point: 8,587 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	224 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	1,500 ft
Cement top:	1,679 ft → w/12 8 wt C 30 ft csg @ 2570' ✓

Directional well information:

Kick-off point	1950 ft
Departure at shoe:	332 ft
Maximum dogleg:	2 °/100ft
Inclination at shoe:	0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	10653	4.5	11.60	HCP-110	Buttress	10630	10653	3.875	929.6

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	7179	8650	1.205 ✓	7179	10690	1.49 ✓	99	367	3.70 B ✓

Prepared by: Dustin K. Doucet, Div of Oil,Gas & Mining

Phone: (801) 538-5281

FAX: (801) 359-3940

Date: January 24,2011

Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 10630 ft, a mud weight of 13 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

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

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

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	January 24, 2011
WELL NAME	**NBU 921-25J4CS**	TD	10,630' TVD 10,653' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah
FINISHED ELEVATION	4,959'		
SURFACE LOCATION	NW/4 SE/4 1,886' FSL 1,743' FEL Sec 25 T 9S R 21E		
	Latitude: 40.004947 Longitude: -109.496190 NAD 27		
BTM HOLE LOCATION	NW/4 SE/4 1,604' FSL 1,920' FEL Sec 25 T 9S R 21E		
	Latitude: 40.004174 Longitude: -109.496819 NAD 27		
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: UDOGM (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept.		

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'	14"		
			11"	8-5/8", 28#, IJ-55, LTC	Air mist
			7-7/8"	4-1/2" 11.6# HCP-110 or equivalent BTC/LTC csg	Water / Fresh Water Mud 8.3-13.0 ppg

All water flows encountered while drilling will be reported to the appropriate agencies.

Green River @ 1,453'
Top of Birds Nest @ 1,736
Mahogany @ 2,119

Preset f/ GL @ 2,570' MD

Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.

Wasatch @ 4,703'

Mud logging program TBD
Cased hole logging program from TD - surf csg

Mverde @ 7,379' TVD

MVU2 @ 8,275' TVD

MVU1 @ 8,825' TVD

Sego @ 9,569' TVD

Castlegate @ 9,644' TVD

MN5 @ 10,064' TVD

Max anticipated Mud required 13.0 ppg

TD @ 10,630' TVD
10,653' MD

RECEIVED January 24, 2011

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	2,570'	28.00	IJ-55	LTC	0.70	1.56	4.79
								10,690	8,650	367,000
PRODUCTION	4-1/2"	0	to	10,653'	11.60	HCP-110	BTC	4.56	1.20	3.71

*Burst on suface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.09

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 = 13.0 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 4,726 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 13.0 ppg) 0.66 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 7,064 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	2,070'	65/35 Poz + 6% Gel + 10 pps gilsonite	190	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,203'	Premium Lite II + 3% KCl + 0.25 pps	310	20%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	6,450'	50/50 Poz/G + 10% salt + 2% gel	1,350	20%	14.30	1.31
			+ 0.1% R-3				

*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

DRILLING SUPERINTENDENT: John Merkel / Lovel Young

RECEIVED January 24, 2011

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# Ensign 139
Submitted By KENNY MORRIS Phone Number 435- 828-0984
Well Name/Number NBU-921-25J4CS
Qtr/Qtr NW-SE Section 25 Township 9S Range 21E
Lease Serial Number UO 1194 ST
API Number 43047512550000

Casing – Time casing run starts, not cementing times.

☐ Production Casing
☐ Other

Date/Time ___ _ AM ☐ PM ☐

RECEIVED
JAN 24 2011
DIV. OF OIL, GAS & MINING

BOPE
☐ Initial BOPE test at surface casing point
☐ Other

Date/Time 1/24/2011 01:00 AM ☒ PM ☐

Rig Move
Location To: _____

Date/Time _____ _____ AM ☐ PM ☐

Remarks _____

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# Ensign 139
Submitted By KENNY MORRIS Phone Number 435- 828-0984
Well Name/Number NBU-921-25J4CS
Qtr/Qtr NW-SE Section 25 Township 9S Range 21E
Lease Serial Number UO 1194 ST
API Number 43047512550000

Casing – Time casing run starts, not cementing times.

☒ Production Casing
☐ Other

Date/Time 1/31/2011 06:00 AM ☒ PM ☐

RECEIVED
JAN 29 2011
DIV. OF OIL, GAS & MINING

BOPE
☒ Initial BOPE test at surface casing point
☐ Other

Date/Time 2/3/2011 01:00 AM ☒ PM ☐

Rig Move
Location To: WILL RIG MOVE TO NEW PAD TUESDAY NBU-921-25J2 WITH BOP TEST TO FOLLOW AFTER RIG UP AROUND THE 3RD OF FEB UPDATE TO FOLLOW

Date/Time _____ _____ AM ☐ PM ☐

Remarks _____

API Well No: 43047512550000

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST

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 921-25J4CS

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

9. API NUMBER: 43047512550000

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: 1886 FSL 1743 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 25 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

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ✓ SUBSEQUENT REPORT — Date of Work Completion: 1/31/2011
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

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

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

FINISHED DRILLING FROM 2610' TO 10,660' ON JANUARY 30, 2011. RAN 4 ½" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 575 SX CLASS G PREM LITE @ 13.0 PPG, 1.77 YD. TAILED CEMENT W/ 1200 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.26 YD. DISPLACED W/ 165 BBLS CLAYFIX WATER. FINAL LIFT 3200 PSI. BUMPED PLUG, FLOATS HELD, NO CEMENT BACK. RD CEMENTERS AND CLEANED PITS. RELEASED ENSIGN RIG #139 ON JANUARY 31, 2011 @ 23:59 HRS. 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: 02/09/2011

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst

SIGNATURE	DATE
N/A	2/1/2011

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047512550000

A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the pit.

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST

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 921-25J4CS

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

9. API NUMBER: 43047512550000

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: 1886 FSL 1743 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 25 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

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ☐ SUBSEQUENT REPORT — Date of Work Completion:
- ☐ SPUD REPORT — Date of Spud:
- ✓ DRILLING REPORT — Report Date: 3/29/2011

TYPE OF ACTION

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

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

THE SUBJECT WELL LOCATION WAS PLACED ON PRODUCTION ON 03/29/2011 AT 12:00 AM. 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)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst

SIGNATURE	DATE
N/A	3/31/2011

RECEIVED Mar. 31, 2011

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

AMENDED REPORT ☐ (highlight changes)

FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1194 ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER: NBU 921-25J4CS

9. API NUMBER: 4304751255

10 FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

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

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

2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE, L.P.

3. ADDRESS OF OPERATOR: P.O.BOX 173779 CITY DENVER STATE CO ZIP 80217

PHONE NUMBER: (720) 929-6100

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: NWSE 1886 FSL 1743 FEL S25, T9S, R21E

BHL reviewed by HSM

AT TOP PRODUCING INTERVAL REPORTED BELOW: NWSE 1616 FSL 1931 FEL S25, T9S, R21E

AT TOTAL DEPTH: NWSE 1552 FSL 1885 FEL S25, T9S, R21E

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 25 9S 21E S

12. COUNTY: UINTAH

13. STATE: UTAH

14. DATE SPUDDED: 11/22/2010

15. DATE T.D. REACHED: 1/30/2011

16. DATE COMPLETED: 3/29/2011 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 4959 GL

18. TOTAL DEPTH: MD 10,660 TVD 10,635

19. PLUG BACK T.D.: MD 10,603 TVD 10,578

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

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

ACBL-CHI TRIPLE COMBO-RMTE

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#		40		28			
11"	8 5/8" IJ-55	28#		2,595		460		0	
7 7/8"	4 1/2" P110	11.6#		10,647		1,775		1640	

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"	9,166							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) WASATCH	7,353	7,354		
(B) MESAVERDE	7,432	10,333		
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS
7,353	7,354	0.36	4	Open ☑ Squeezed ☐
7,432	10,333	0.36	180	Open ☑ Squeezed ☐
				Open ☐ Squeezed ☐
				Open ☐ Squeezed ☐

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7353 - 10,333	PUMP 13,294 BBLS SLICK H2O & 459,389 LBS SAND

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

RECEIVED
MAY 10 2011
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(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
3/29/2011	4/4/2011	24		0	2,327	523	FLOWING

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
20/64	1,825	2,550					0	2,327	523	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	1,569				
BIRD'S NEST	1,805				
MAHOGANY	2,133				
WASATCH	4,709	7,394			
MESAVERDE	7,394	10,660	TD		

35. ADDITIONAL REMARKS (Include plugging procedure)

Attached is the chronological well history and final survey. Completion chrono details individual frac stages.

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

NAME (PLEASE PRINT) ANDREW LYTLE TITLE REGULATORY ANALYST

SIGNATURE DATE 4/29/11

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 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/28/2010	End Date: 2/1/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/30/2010	11:00 - 15:00	4.00	MIRU	01	C	P		SKID RIG & RIG UP
	15:00 - 17:30	2.50	PRPSPD	14	A	P		WELD ON CONDUCTOR & RIG UP FLOWLINE
	17:30 - 18:30	1.00	PRPSPD	06	A	P		PICK UP BHA
	18:30 - 20:30	2.00	DRLSUR	02	B	P		SPUD 11" SURFACE HOLE F/ 40'-230' // ROP= 105 FPH // WOB=10K // RPM= 55/96 // SPP= 950
	20:30 - 22:30	2.00	DRLSUR	06	A	P		TOOH & PU/ DIR.TOOLS & ORIENTATE TO MWD
	22:30 - 0:00	1.50	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 230'- 411 // ROP=120 FPH // WOB= 10-13K // RPM= 55/96 // SPP= 950/850 // GPM= 600
12/31/2010	0:00 - 6:00	6.00	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 411'- 982' // ROP=95 FPH // WOB= 10-13K // RPM= 55/96 // SPP= 1100/980 // GPM= 600
	6:00 - 18:00	12.00	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 982'-1899' // ROP=76 FPH // WOB= 12-14K // RPM= 55/96 // SPP= 1200/1050 // GPM= 600
	18:00 - 0:00	6.00	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 1899'-2311' // ROP=76 FPH // WOB= 12-14K // RPM= 55/96 // SPP= 1300/11150 // GPM= 600
1/1/2011	-		RDMO					CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28 SPUD DATE/TIME: 12/30/2010 18:30 SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,610 Total SURFACE hours: 32.50 Surface Casing size: 8 5/8 # of casing joints ran: 58 Casing set MD: 2,589.0 # sx of cement: 100/225/35 Cement blend (ppg:) 11.0/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 35 Describe cement issues: NONE Describe hole issues: NONE
	0:00 - 5:00	5.00	DRLSUR	02	D	P		DIR DRLG 11" SURFACE HOLE F/ 2311'-2610 // ROP=60 FPH // WOB= 12-14K // RPM= 55/96 // SPP= 1300/11150 // GPM= 600 // last survey @ 2550'= 3.83 DEG, 220.72 AZ.- 3' LEFT OF LINE
	5:00 - 5:30	0.50	DRLSUR	05	A	P		CIRC & COND F/ 8-5/8" CSG
	5:30 - 10:00	4.50	DRLSUR	06	A	P		LD DRILL STRING & DIR TOOLS
	10:00 - 14:30	4.50	CSG	12	A	P		PJSM // RUN 58 JT'S, 8.625", 28#, J-55, LT&C CSG // SHOE SET # 2589', FC @ 2543'
	14:30 - 15:00	0.50	CSG	05	A	P		CIRC 8.625" CSG @ 2589'
	15:00 - 16:00	1.00	CSG	12	E	P		PJSM // TEST LINES TO 2500 PSI // PUMP 25 BBL'S WATER SPACER // LEAD= 200SX CLASS G (YIELD=3.82 CUFT/SK, WT= 11.0 PPG) TAIL=225 SX CLASS G +2% CACL2 + .25#/SK SUPERFLAKE (YIELD=1.15 CUFT/SK, WT=15.8 PPG) // DROP PLUG & DISPLACE W/ 158 BBL'S WATER // PLUG DN @ 15:58 01/01/2011 // BUMP PLUG W/ 1390 PSI // FINAL= 300PSI // CHECK FLOATS, HELD W/ 2 BBL'S BACK TO TRUCK // 35 BBL'S CMT TO SURFACE

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/28/2010	End Date: 2/1/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:00 - 17:00	1.00	CSG	14	A	P		CUT OFF CONDUCTOR & HANG CSG
	17:00 - 18:00	1.00	CSG	12	E	P		TOP OUT W/ 35 SX CLASS G CMT (YIELD=1.15 CUFT/SK, WT= 15.8 PPG)
	18:00 - 20:00	2.00	RDMO	01	E	P		CLEAN PITS & RIG DN // RELEASE RIG @ 20:00 01/01/2011
1/23/2011	6:00 - 8:00	2.00	MIRU	01	C	P		THAW SHOES,SKID RIG TO NEXT WELL
	8:00 - 11:00	3.00	PRPSPD	14	A	P		NUBOP,INSTALL FLARE,FLOW LINES,FUNCTION TEST BOP
	11:00 - 13:00	2.00	PRPSPD	09	A	P		SLIP & CUT 97' DRLG LINE
	13:00 - 18:30	5.50	PRPSPD	15	A	P		TEST BOP ANNULAR 2.5K,RAMS,CHOKE,MANIFOLD,KILL LINE,FLOOR VALVES TO 5K,CSG 1.5K F/30 MIN ,250 LOWS
	18:30 - 19:30	1.00	PRPSPD	07	A	P		RIG SERVICE CHANGE SAVOR SUB,TOP DRIVE SERVICE
	19:30 - 0:00	4.50	PRPSPD	06	A	P		P/U BIT & BHA #1,SCRIBE TOOLS,TIH,LEVEL DERRICK,TAG CEMENT@2480
1/24/2011	0:00 - 1:00	1.00	DRLPRO	02	F	P		DRILL CEMENT & FE FROM 2480 TO 2615
	1:00 - 11:30	10.50	DRLPRO	02	D	P		DIR DRILL F/ 2615 TO 3660 =1045 ' ,AVG 99 ' FPH ,WOB16/ 20,RPM 42/115,STKS 100,GPM 495,PSI 1000/1450,TORG 3/7K,SLIDE 17 %, ROT 83 % - MW 8.6 VIS 26,CIRC RES PIT
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:00 - 0:00	12.00	DRLPRO	02	D	P		DIR DRILL F/3660 TO 4845 =1185 ' ,AVG 99 ' FPH ,WOB16/ 20,RPM 42/115,STKS 100,GPM 495,PSI 1000/1450,TORG 3/7K,SLIDE 20 %, - MW 8.6 VIS 26,CIRC RES PIT
1/25/2011	0:00 - 9:00	9.00	DRLPRO	02	D	P		DIR DRILL F/4845 TO 5746 =901 ' ,AVG 99 ' FPH ,WOB16/ 20,RPM 42/115,STKS 100,GPM 495,PSI 1000/1450,TORG 3/7K,SLIDE 5 %, - MW 8.6 VIS 26,CIRC RES PIT
	9:00 - 11:00	2.00	DRLPRO	22	F	X		LOST RETURNS,300 BBLS TOTAL,MIX LCM DURING SLOW PUMP,VIS UP,TRANSFER PREPED MUD OVER F/PRE MIX TANK
	11:00 - 11:30	0.50	DRLPRO	02	D	P		DIR DRILL F/5746 TO 5838=92 ' ,AVG 92 ' FPH ,WOB16/ 20,RPM 42/115,STKS 100,GPM 495,PSI 14001650,TORG 6/8K,SLIDE 0%,MW 9.0/36 8%LCM
	11:30 - 12:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:00 - 0:00	12.00	DRLPRO	02	D	P		DIR DRILL F/5838 TO 6650 =812 ,AVG 68 ' FPH ,WOB18/ 20,RPM 42/115,STKS 100,GPM 495,PSI 1500/ 1800,TORG 6/9,SLIDE 17%
1/26/2011	0:00 - 14:00	14.00	DRLPRO	02	D	P		DIR DRILL F/6650 TO 7468 =818 ,AVG 58 ' FPH ,WOB18/ 20,RPM 42/115,STKS 100,GPM 495,PSI 1700/2000,TORG 6/9,SLIDE 8%,MW 10.2/43 12% LCM
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:30 - 14:30	0.00	DRLPRO	02	D	P		DIR DRILL F/7468 TO 8020 =554 ,AVG 46 ' FPH ,WOB18/ 20,RPM 42/115,STKS 100,GPM 495,PSI 1500/ 1800,TORG 6/11,SLIDE 5%
1/27/2011	0:00 - 13:30	13.50	DRLPRO	02	D	P		DIR DRILL F/8020 TO 8553 =533 ,AVG 39 ' FPH ,WOB18/ 20,RPM 42/115,STKS 100,GPM 495,PSI 2000/2350,TORG 6/11,SLIDE 30% 152',MW 11.2/44 15% LCM
	13:30 - 14:00	0.50	DRLPRO	07	A	P		DAILY SERVICE
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DIR DRILL F/ 8553 TO 8960 =407,AVG 40 ' FPH ,WOB18/ 20,RPM 42/115,STKS 90,GPM 445,PSI 1850/2100,TORG 6/11,SLIDE %,MW 11.8/44 1518% LCM

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/28/2010	End Date: 2/1/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/28/2011	0:00 - 8:00	8.00	DRLPRO	02	D	P		DIR DRILL F/8960 TO 9155 =195,AVG 24 ' FPH ,WOB18/ 24,RPM 42/115,STKS 90,GPM 445,PSI 1850/2100,TORG 6/11,SLIDE %,MW 11.8/44 1518% LCM
	8:00 - 16:00	8.00	DRLPRO	06	A	P		PUMP OUT 2 STNDS,FLOW CHECK,PUMPPILL,POOH,REAM UP 4688 TO 4234', CHANGE BIT & MTR
	16:00 - 18:00	2.00	DRLPRO	06	A	P		P/U BHA#2,SCRIBE TOOLS,TIH TO SHOE,CIRC TO CHECK BHA
	18:00 - 20:30	2.50	DRLPRO	09	A	S		CUT & SLIP DRLG LINE
	20:30 - 0:00	3.50	DRLPRO	06	A	P		TIH W/BHA #2
1/29/2011	0:00 - 4:00	4.00	DRLPRO	06	A	P		TIH W/BHA #2,CIRC 3000 & 6000',TIH TO 9046
	4:00 - 4:30	0.50	DRLPRO	03	D	P		WASH & REAM F/9046 TO 9155',5'FILL,NO FLARE
	4:30 - 14:00	9.50	DRLPRO	02	D	P		DIR DRILL F/9155 TO 9637=482 ,AVG 51 ' FPH ,WOB18/ 22,RPM 42/115,STKS 90,GPM 445,PSI 2000/2350,TORG 6/11,SLIDE 2 %,MW 11.8/44 18% LCM
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DIR DRILL F/9637 TO 9990 =353 ,AVG 37 ' FPH ,WOB18/ 22,RPM 42/115,STKS 86,GPM 430,PSI 2000/2350,TORG 8/11,SLIDE 0 % 25',MW 12.3/44 20% LCM
1/30/2011	0:00 - 13:00	13.00	DRLPRO	02	D	P		DIR DRILL F/9990 TO 10660 =670 ,AVG 51 ' FPH ,WOB18/ 22,RPM 42/76,STKS 86,GPM 430,PSI 2000/2350,TORG 8/11,SLIDE 0 % ',MW 12.6/44 20% LCM
	13:00 - 14:00	1.00	DRLPRO	05	C	P		FLOW CHECK,FINAL SURVEY@10604=2.76 DEG 135 AZI
	14:00 - 17:00	3.00	DRLPRO	06	E	P		SHORTTRIP BACK TO 8800'
	17:00 - 18:00	1.00	DRLPRO	05	C	P		CIRC BTMS UP TO LDDP & BHA 12.6+/45 18% LCM,NO FLARE
	18:00 - 0:00	6.00	DRLPRO	06	A	P		CHECK FLOW/NO FLOW,PUMP OUT 4 STNDS,PUMPPILL,BLOWDOWN TOPDRIVE, & LDDP,F/CSG RUN
1/31/2011	0:00 - 6:00	6.00	DRLPRO	06	A	P		LDDP & BHA,DRAIN MTR
	6:00 - 6:30	0.50	DRLPRO	14	B	P		PULL WEARRING
	6:30 - 16:30	10.00	CSG	12	C	P		SAFETY MEET W/FRANKS,R/U AND RUN 255 JTS 4.5 P-110 11.6#,TO SHOE DEPTH 10646,FC@10604'MARKERS@4728-7387',R/D FRANKS,,WASH BRIDGE@10373'
	16:30 - 18:00	1.50	CSG	05	D	P		CIRC BTMS UP F/CEMENT,NO FLARE
	18:00 - 20:30	2.50	CSG	12	E	P		SAFETY MEET W/HALLIBURTON ,R/U PUMP 40BBLS FRESH ,575 SX LEAD#13- 1.77 YLD,1200SX TAIL #14.3- 1.26 YLD,DISPLACE165 BBLS CLAYFIX,FINALLIFT 3200 PSI,BUMPPLUG 500 OVER,FLOATS HELD,NO CEMENT BACK
	20:30 - 21:00	0.50	CSG	14	A	P		SET SLIPS 115K,NDBOP,ROUGH CUT CSG
	21:00 - 23:59	2.98	RDMO	01	E	P		CLEAN PITS RELEASE RIG @00:00 2/1/2011

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/28/2010	End Date: 2/1/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	23:59 - 0:00	0.02	RDMO					CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: 28 SPUD DATE/TIME: 12/21/2010 14:00 SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,610 Total SURFACE hours: 32.50 Surface Casing size: 8 5/8 # of casing joints ran: 58 Casing set MD: 2,589.0 # sx of cement: 360 Cement blend (ppg:) 15.8 Cement yield (ft3/sk): 1.15 # of bbls to surface: 35 Describe cement issues: NA Describe hole issues: NA PRODUCTION: Rig Move/Skid start date/time: 1/23/2011 6:00 Rig Move/Skid finish date/time: 1/23/2011 8:00 Total MOVE hours: 2.0 Prod Rig Spud date/time: 1/24/2011 0:00 Rig Release date/time: 1/31/2011 23:59 Total SPUD to RR hours: 192.0 Planned depth MD 10,650 Planned depth TVD 10,630 Actual MD: 10,660 Actual TVD: 10,634 Open Wells $: $1,009,798 AFE $: $1,056,239 Open wells $/ft: $94.73 PRODUCTION HOLE: Prod. From depth: 2,610 Prod. To depth: 10,660 Total PROD hours: 130.5 Log Depth: NO LOGS Float Collar Top Depth: 10604 Production Casing size: 4 1/2 # of casing joints ran: 255 Casing set MD: 10,646.0 Stage 1 # sx of cement: 575 LEAD 1200 TAIL Cement density (ppg:) 13/14.3 Cement yield (ft3/sk): 1.77/1.26 Stage 2 # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Top Out Cmt # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Est. TOC (Lead & Tail) or 2 Stage : LEAD,600,TAIL 4200 Describe cement issues: NO CEMENT BACK Describe hole issues: 20%LCM,12.7#MUD DIRECTIONAL INFO: KOP: 201 Max angle: 10.63@1243'

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	Start Date: 11/28/2010	End Date: 2/1/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								Departure: 358'@TD Max dogleg MD: 1.95@3041

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/18/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, RIGGING UP
	7:15 - 15:00	7.75	COMP	37	B	P		MIRU CASED HOLE SOLUTIONS & FRAC TECH FRAC EQUIP, [DID NOT PRESSURE TEST BEFORE 1ST SHOOT WAS DONE] P/U RIH W/ 3-1/8 EXPEND, 23 GRM, 0.36" HOLE, PERF LOWER MESAVERDE . 10,332'-10,333' 4 SPF, 90* PH, 4 HOLES. 10,265'-10,266' 4 SPF, 90* PH, 4 HOLES. 10,219'-10,220' 4 SPF, 90* PH, 4 HOLES. 10,206'-10,207' 4 SPF, 90* PH, 4 HOLES. 10,169'-10,171' 4 SPF, 90* PH, 6 HOLES. 10,151'-10,152' 4 SPF, 90* PH, 4 HOLES. [26 HOLES] SWI.
3/21/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, PRE FRAC INSTUCTIONS

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 18:30	11.25	COMP	36	E	P		M BVGT54` FRAC STG #1] LOWER MESAVERDE 10,151'-10,333' [26 HOLES] PRESSURE TEST SURFACE LINES TO 9,900# FRAC STG #1] WHP=1,541#, BRK DN PERFS=3,892#, @=4.6 BPM, INJ RT=50.1, INJ PSI=6,440#, ISIP=3,150#, FG=.74, PUMP'D 3,978 BBLS SLK WTR W/ 91,842 # TLC , ISIP=3,706#, FG=.79, AR=50.5, AP=5,500#, MR=52.1, MP=8,358#, NPI=556#, 26/26 CALC PERFS OPEN. 100% P/U RIH W/ HALIBURTON 10K CBP, SET CBP @=9,488', POOH, MIRU B&C TESTERS PRESSURE TEST CAG & FRAC VALVES 500# FOR 15 MIN, W/ NO BLEED OFF, 2500# FOR 15 MIN W/ NO BLEED OFF, 7000# FOR 30 MIN W/ NO BEED OFF. PERF STG #2] P/U RIH W/ PERF GUN, PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 9,386'-9,388' 3 SPF, 120* PH, 6 HOLES. 9,332'-9,333' 3 SPF, 120* PH, 3 HOLES. 9,258'-9,259' 4 SPF, 90* PH, 4 HOLES. 9,230'-9,232' 3 SPF, 120* PH, 6 HOLES. 9,182'-9,183' 4 SPF, 90* PH, 4 HOLES. [23 HOLES] FRAC STG #2] WHP=652#, BRK DN PERFS=3,661#, @=4.1 BPM, INJ RT=50, INJ PSI=5,596#, ISIP=2,604#, FG=.71, PUMP'D 1,373 BBLS SLK WTR W/ 49,360# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL W/ 54,360# TOTAL PROP PUMP'D, ISIP=3,065#, FG=.76, AR=50, AP=4,250#, MR=51.1, MP=6,333#, NPI=461# 23/23 CALC PERFS OPEN. 100% PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=9,130', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 9,112'-9,113' 4 SPF, 90* PH, 4 HOLES. 9,082'-9,083' 4 SPF, 90* PH, 4 HOLES. 9,050'-9,052' 3 SPF, 120* PH, 6 HOLES. 9,001'-9,002' 4 SPF, 90* PH, 4 HOLES. 8,950'-8,951' 3 SPF, 120* PH, 3 HOLES. 8,871'-8,872' 3 SPF, 120* PH, 3 HOLES. [24 HOLES] FRAC STG #3] WHP=1,997#, BRK DN PERFS=4,021#, @=4.4 BPM, INJ RT=50, INJ PSI=4,927#, ISIP=2,655#, FG=.73, PUMP'D 1,715 BBLS SLK WTR W/ 64,450# 30/50 MESH W/ 5000# RESIN COAT IN TAIL W/ 69,450# TOTAL PROP PUMP'D, ISIP=2,638#, FG=.73, AR=50, AP=4,150#, MR=51.3, MP=6,288#, NPI=-17# 24/24 CALC PERFS OPEN. 100% PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,831', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,800'-8,801' 4 SPF, 90* PH, 4 HOLES. 8,672'-8,673' 4 SPF, 90* PH, 4 HOLES. 8,656'-8,657' 4 SPF, 90* PH, 4 HOLES. 8,623'-8,624' 3 SPF, 120* PH, 3 HOLES. 8,581'-8,582' 3 SPF, 120* PH, 3 HOLES.

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								8,566'-8,567' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] SWIFN.
3/22/2011	7:00 - 7:15	0.25	COMP	48		P		

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 7:15	0.00	COMP	36	E	P		FRAC STG #4] MESAVERDE 8,566'-8,801' [21 HOLES] FRAC STG #4] WHP=1,755#, BRK DN PERFS=4,359#, @=4.4 BPM, INJ RT=50.4, INJ PSI=4,370#, ISIP=2,154#, FG=.68, PUMP'D 1,026 BBLS SLK WTR W/ 34,189# 30/50 MESH W/ 5000# RESIN COAT IN TAIL W/ 39,189# TOTAL PROP PUMP'D, ISIP=2,435#, FG=.71, AR=50.4, AP=4,000#, MR=51.1, MP=5,636#, NPI=281#, 21/21 CALC PERFS OPEN. 100% PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,520', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,482'-8,484' 3 SPF, 120* PH, 6 HOLES. 8,474'-8,475' 3 SPF, 120* PH, 3 HOLES. 8,426'-8,428' 4 SPF, 90* PH, 8 HOLES. 8,356'-8,358' 3 SPF, 120* PH, 6 HOLES. [23 HOLES] FRAC STG #5] WHP=765#, BRK DN PERFS=3,4366#, @=4.4 BPM, INJ RT=50.3, INJ PSI=4,173#, ISIP=2,255#, FG=.70, PUMP'D 737 BBLS SLK WTR W/ 21,114# 30/50 MESH W/ 5000# RESIN COAT IN TAIL W/ 26,119# TOTAL PROP PUMP'D, ISIP=2,462#, FG=.72, AR=50.2, AP=3,900#, MR=51, MP=4,955#, NPI=207#, 23/23 CALC PERFS OPEN. 100% PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,120', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,092'-8,094' 3 SPF, 120* PH, 6 HOLES. 8,072'-8,074' 3 SPF, 120* PH,6 HOLES. 7,086'-7,988' 3 SPF, 120* PH, 6 HOLES. 7,899'-7,901' 3 SPF, 120* PH, 6 HOLES. [24 HOLES] FRAC STG #6] WHP=607#, BRK DN PERFS=2,778#, @=4.6 BPM, INJ RT=51.6, INJ PSI=4,190#, ISIP=1,361#, FG=.60, PUMP'D 983 BBLS SLK WTR W/ 32,918# 30/50 MESH W/ 5000# RESIN COAT IN TAIL W/ 3,7918# TOTAL PROP PUMP'D, ISIP=2,227#, FG=.71, AR=50.4, AP=3,750#, MR=51, MP=5,765#, NPI=563#, 24/24 CALC PERFS OPEN. 100% PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,848', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 7,816'-7,818' 3 SPF, 120* PH, 6 HOLES. 7,782'-7,783' 3 SPF, 120* PH, 3 HOLES. 7,736'-7,737' 3 SPF, 120* PH, 3 HOLES. 7,646'-7,648' 3 SPF, 120* PH, 6 HOLES. 7,602'-7,603' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] FRAC STG #7] WHP=1,063#, BRK DN PERFS=2,778#, @=4.4 BPM, INJ RT=50.1, INJ PSI=4,533#, ISIP=1,361#, FG=.61, PUMP'D 1,400 BBLS SLK WTR W/ 51,641# 30/50 MESH W/ 5000# RESIN COAT IN TAIL W/ 56,641# TOTAL PROP PUMP'D, ISIP=1,924#, FG=.68, AR=50, AP=4,150#, MR=51.6, MP=5,321#, NPI=563#, 21/21 CALC

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								PERFS OPEN. 100% PERF STG #8] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,575', PERF MESAVERDE / WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 7,543'-7,545' 3 SPF, 120* PH, 6 HOLES. 7,471'-7,472' 4 SPF, 90* PH, 4 HOLES. 7,452'-7,453' 4 SPF, 90* PH, 4 HOLES. 7,432'-7,433' 4 SPF, 90* PH, 4 HOLES. 7,353'-7,354' 4 SPF, 90* PH, 4 HOLES, WASATCH [22 HOLES] FRAC STG #8] WHP=664#, BRK DN PERFS=2,424#, @=4.5 BPM, INJ RT=50.3, INJ PSI=4,156#, ISIP=1,310#, FG=.61, PUMP'D 2,082 BBLS SLK WTR W/ 78,875# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL, ISIP=2,137#, FG=.72, AR=50.5, AP=3,402#, MR=51, MP=4,483#, NPI=827#, 22/22 CALC PERFS OPEN. 100% P/U RIH W/ HALIBURTON 8K CBP, SET @=7,303' FOR TOP KILL. RIG DOWN WIRE LINE & FRAC EQUIP, MOVE OFF LOC TOTAL BBLS=13,294 BBLS TOTAL SAND=459,389# GALS SCALE INHIB=1065 GALS BIOCIDE=290
3/28/2011	7:00 - 7:15	0.25	COMP	48		P		JSA- RDSU, RUSU. PU TBG.
	7:15 - 11:00	3.75	COMP	30	A	P		RDSU. LEVEL OUT DIRT. MOVE OVER TO WELL. START RUSU. GUY LINE SNAG AND KINKED. WAIT FOR NEW GUY LINE. RUSU. ND WH. NU BOP. RU FLOOR. SPOT TBG. MU 3-7/8" BIT, POBS, 1.87" XN.
	11:00 - 17:00	6.00	COMP	31	I	P		RIH AS MEAS AND PU 2-3/8" L-80 TBG. WITH 143-JTS IN, EOT AT 4528'. SWITCH PIPE AND BLIND RAMS, FILL TBG AND PRES TEST TO 2500#. GOOD. CONT PU TBG. WIND BLOWING HARD. SDFN W/ 217-JTS IN, EOT AT 6871'.
3/29/2011	7:00 - 7:15	0.25	COMP	48		P		JSA- D/O PLUGS. LD TBG. LAND TBG. POBS.

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 15:30	8.25	COMP	44	C	P		CONT RIH AS PU TBG. TAG AT 7256' W/ 230-JTS IN. RU DRLG EQUIP. FILL TBG AND EST CIRC. D/O PLUGS. #1- C/O 55' SAND TO CBP AT 7303'. D/O IN 11 MIN. 400# INC. RIH. #2- C/O 30' SAND TO CBP AT 7575'. D/O IN 9 MIN. 600# INC. RIH. #3- C/O 30' SAND TO CBP AT 7848'. D/O IN 10 MIN. 500# INC . RIH. #4- C/O 26' SAND TO CBP AT 8120'. D/O IN 7 MIN. 600# INC. RIH. #5- C/O 36' SAND TO CBP AT 8520'. D/O IN 5 MIN. 500# INC. RIH. #6- C/O 30' SAND TO CBP AT 8831'. D/O IN 7 MIN. 600# INC. RIH. #7- C/O 17' SAND TO CBP AT 9130'. D/O IN 3 MIN. 400# INC. RIH. #8- C/O 100' SAND TO CBP AT 9488'. D/O IN 2 MIN. 400# INC. RIH. PBTD- C/O 170' SAND TO PBTD AT 10,515' W/ 332-JTS IN. (182' RATHOLE). CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 43-JTS TBG. PU 4" 10K HANGER. LUB IN AND LAND 289-JTS 2-3/8" L-80 TBG W/ EOT AT 9165.96'. RD FLOOR. ND BOP. NU WH. POBS AT 2400#. SITP 700, SICP 2100, SURFACE CSG OPEN (SURFACE CSG HAD DRLG MUD DRIBBLE OUT ON PLUGS 5-7 THEN QUIT). HOOK UP TO HAL 9000. TURN OVER TO FBC AND SALES. RDSU. MOVE OVER AND SPOT IN ON CIGE 235. TBG DETAIL KB 14.00 4" 10K HANGER .83 289-JTS 2-3/8" L-80 9148.93 1.87" XN FE POBS 2.20 EOT 9165.96 345-JTS DELIVERED. 55-JTS RETURNED. 1-JT BAD. TWTR 11,170 / TWR 2250 / LTR 8920
	12:00 - 12:00	0.00	PROD	50				WELL TURNED TO SALES @ 1200 HR ON 3/29/11 - 1520 MCFD, 2040 BWPD, CP 2100#, FTP 700#, CK 20/64"
3/30/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3100#, TP 2125#, 20/64" CK, 65 BWPH, HVY SAND, - GAS TTL BBLS RECOVERED: 3390 BBLS LEFT TO RECOVER: 7780
3/31/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 3050#, TP 2100#, 20/64" CK, 50 BWPH, HVY SAND, - GAS TTL BBLS RECOVERED: 4690 BBLS LEFT TO RECOVER: 6480
4/1/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2900#, TP 2050#, 20/64" CK, 45 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 5790 BBLS LEFT TO RECOVER: 5380
4/2/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2800#, TP 2000#, 20/64" CK, 35 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 6650 BBLS LEFT TO RECOVER: 4520

US ROCKIES REGION

Operation Summary Report

Well: NBU 921-25J4CS	Spud Conductor: 11/22/2010	Spud Date: 12/30/2010
Project: UTAH-UINTAH	Site: NBU 921-25J4 PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 3/21/2011	End Date: 3/29/2011
Active Datum: RKB @4,973.00ft (above Mean Sea Level)	UWI: NW/SE/0/9/S/21/E/25/0/0/6/PM/S/1,886.00/E/0/1,743.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/3/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1900#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 7370 BBLS LEFT TO RECOVER: 3800
4/4/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2550#, TP 1825#, 20/64" CK, 25 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 8005 BBLS LEFT TO RECOVER: 3165
	7:00 -			50				WELL IP'D ON 4/4/11 - 2327 MCFD, 0 BOPD, 523 BWPD, CP 2550#, FTP 1825#, CK 20/64", LP 273#, 24 HRS

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12
NBU 921-25J4 Pad
NBU 921-25J4CS

OH

Survey: Survey #2 SDI MWD PRODUCTION

Standard Survey Report

02 February, 2011

Anadarko
Petroleum Corporation

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Site:	NBU 921-25J4 Pad	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Well:	NBU 921-25J4CS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**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 921-25J4 Pad, SEC 25 T9S R21E

Site Position:		**Northing:**	14,531,392.03 usft	**Latitude:**	40° 0' 17.737 N
From:	Lat/Long	**Easting:**	2,061,567.85 usft	**Longitude:**	109° 29' 46.046 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.97 °

Well NBU 921-25J4CS, 1886' FSL 1743' FEL

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,531,399.00 usft	**Latitude:**	40° 0' 17.809 N
	+E/-W	0.00 ft	**Easting:**	2,061,549.25 usft	**Longitude:**	109° 29' 46.284 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,959.00 ft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	01/21/2011	11.13	65.88	52,372

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	221.31

Survey Program **Date** 02/02/2011

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
5.00	2,555.00	Survey #1 WEATHERFORD SURFACE M	MWD	MWD - Standard
2,612.00	10,660.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1

Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Vertical Section (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**
2,555.00	3.83	220.72	2,532.61	-230.03	-202.12	306.21	0.00	0.00	0.00
2,612.00	3.52	217.32	2,589.50	-232.86	-204.42	309.86	0.66	-0.54	-5.96
FIRST SDI MWD PRODUCTION SURVEY									
2,703.00	3.80	212.36	2,680.31	-237.63	-207.73	315.63	0.46	0.31	-5.45
2,793.00	4.53	210.24	2,770.07	-243.22	-211.12	322.06	0.83	0.81	-2.36
2,884.00	3.66	196.68	2,860.84	-249.11	-213.76	328.23	1.42	-0.96	-14.90
2,974.00	2.85	172.51	2,950.70	-254.08	-214.29	332.32	1.75	-0.90	-26.86
3,065.00	2.42	134.18	3,041.61	-257.66	-212.62	333.90	1.95	-0.47	-42.12
3,155.00	1.74	117.52	3,131.55	-259.62	-210.05	333.67	1.00	-0.76	-18.51
3,246.00	0.69	136.38	3,222.53	-260.65	-208.44	333.39	1.22	-1.15	20.73

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Site:	NBU 921-25J4 Pad	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Well:	NBU 921-25J4CS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,336.00	0.77	173.37	3,312.52	-261.65	-208.00	333.84	0.52	0.09	41.10
3,427.00	0.88	174.33	3,403.51	-262.95	-207.86	334.73	0.12	0.12	1.05
3,517.00	0.84	153.10	3,493.50	-264.22	-207.49	335.45	0.35	-0.04	-23.59
3,608.00	1.04	158.36	3,584.49	-265.59	-206.89	336.07	0.24	0.22	5.78
3,698.00	0.40	198.88	3,674.48	-266.64	-206.69	336.73	0.87	-0.71	45.02
3,788.00	0.92	215.04	3,764.48	-267.53	-207.20	337.74	0.61	0.58	17.96
3,880.00	0.45	158.74	3,856.47	-268.47	-207.50	338.64	0.83	-0.51	-61.20
3,970.00	0.89	97.21	3,946.47	-268.89	-206.68	338.41	0.87	0.49	-68.37
4,061.00	1.17	120.55	4,037.45	-269.45	-205.17	337.84	0.55	0.31	25.65
4,151.00	1.59	92.49	4,127.43	-269.97	-203.14	336.89	0.87	0.47	-31.18
4,242.00	1.57	107.80	4,218.39	-270.41	-200.69	335.60	0.46	-0.02	16.82
4,332.00	0.86	117.49	4,308.37	-271.10	-198.91	334.95	0.82	-0.79	10.77
4,423.00	0.50	131.88	4,399.36	-271.68	-198.01	334.79	0.43	-0.40	15.81
4,513.00	0.44	151.45	4,489.36	-272.24	-197.56	334.91	0.19	-0.07	21.74
4,604.00	1.10	117.93	4,580.35	-272.96	-196.62	334.83	0.85	0.73	-36.84
4,694.00	1.45	94.22	4,670.33	-273.45	-194.72	333.94	0.70	0.39	-26.34
4,785.00	1.59	87.83	4,761.30	-273.48	-192.31	332.38	0.24	0.15	-7.02
4,875.00	1.22	62.07	4,851.27	-272.99	-190.21	330.62	0.80	-0.41	-28.62
4,966.00	1.01	10.99	4,942.26	-271.75	-189.21	329.03	1.08	-0.23	-56.13
5,056.00	0.91	24.86	5,032.25	-270.32	-188.75	327.66	0.28	-0.11	15.41
5,147.00	0.66	11.25	5,123.24	-269.15	-188.35	326.51	0.34	-0.27	-14.96
5,237.00	0.86	18.78	5,213.23	-268.00	-188.03	325.44	0.25	0.22	8.37
5,328.00	0.55	357.25	5,304.22	-266.92	-187.83	324.49	0.44	-0.34	-23.66
5,418.00	0.40	75.94	5,394.22	-266.41	-187.55	323.92	0.68	-0.17	87.43
5,509.00	0.36	93.73	5,485.22	-266.35	-186.95	323.49	0.14	-0.04	19.55
5,599.00	0.17	93.69	5,575.22	-266.38	-186.54	323.23	0.21	-0.21	-0.04
5,690.00	0.66	154.00	5,666.21	-266.86	-186.17	323.35	0.65	0.54	66.27
5,780.00	1.09	138.32	5,756.20	-267.97	-185.38	323.66	0.54	0.48	-17.42
5,871.00	1.10	152.25	5,847.19	-269.39	-184.39	324.08	0.29	0.01	15.31
5,961.00	0.35	103.98	5,937.18	-270.22	-183.73	324.26	1.01	-0.83	-53.63
6,052.00	0.48	44.38	6,028.18	-270.01	-183.19	323.75	0.47	0.14	-65.49
6,142.00	0.54	36.39	6,118.17	-269.40	-182.67	322.95	0.10	0.07	-8.88
6,233.00	0.60	66.04	6,209.17	-268.86	-181.98	322.09	0.33	0.07	32.58
6,323.00	0.35	164.77	6,299.17	-268.94	-181.48	321.82	0.82	-0.28	109.70
6,414.00	0.46	194.41	6,390.17	-269.56	-181.50	322.29	0.26	0.12	32.57
6,504.00	1.03	194.79	6,480.16	-270.69	-181.80	323.34	0.63	0.63	0.42
6,595.00	1.36	220.40	6,571.14	-272.30	-182.70	325.15	0.68	0.36	28.14
6,685.00	1.48	265.63	6,661.11	-273.20	-184.55	327.05	1.22	0.13	50.26
6,776.00	0.81	303.29	6,752.10	-272.94	-186.26	327.98	1.07	-0.74	41.38
6,866.00	0.59	327.73	6,842.09	-272.20	-187.04	327.94	0.41	-0.24	27.16
6,957.00	0.60	350.79	6,933.08	-271.33	-187.37	327.50	0.26	0.01	25.34
7,047.00	0.58	336.05	7,023.08	-270.45	-187.63	327.01	0.17	-0.02	-16.38
7,138.00	0.44	304.46	7,114.08	-269.83	-188.11	326.86	0.34	-0.15	-34.71

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
Project:	Uintah County, UT UTM12	**TVD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Site:	NBU 921-25J4 Pad	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Well:	NBU 921-25J4CS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,229.00	0.07	86.84	7,205.08	-269.63	-188.34	326.87	0.55	-0.41	156.46
7,319.00	0.07	228.89	7,295.08	-269.67	-188.32	326.88	0.15	0.00	157.83
7,410.00	0.32	185.13	7,386.08	-269.96	-188.39	327.14	0.30	0.27	-48.09
7,500.00	0.09	65.01	7,476.07	-270.18	-188.35	327.28	0.41	-0.26	-133.47
7,590.00	0.74	157.27	7,566.07	-270.68	-188.06	327.47	0.83	0.72	102.51
7,681.00	0.30	219.19	7,657.07	-271.41	-187.98	327.96	0.72	-0.48	68.04
7,771.00	0.57	243.92	7,747.07	-271.79	-188.53	328.61	0.36	0.30	27.48
7,862.00	0.57	235.75	7,838.06	-272.24	-189.31	329.47	0.09	0.00	-8.98
7,953.00	0.77	207.80	7,929.06	-273.04	-189.97	330.50	0.41	0.22	-30.71
8,043.00	0.84	172.75	8,019.05	-274.23	-190.17	331.53	0.54	0.08	-38.94
8,133.00	0.91	167.43	8,109.04	-275.58	-189.93	332.39	0.12	0.08	-5.91
8,224.00	1.03	151.70	8,200.02	-277.00	-189.39	333.10	0.32	0.13	-17.29
8,314.00	1.17	116.81	8,290.01	-278.13	-188.18	333.15	0.75	0.16	-38.77
8,405.00	0.34	119.44	8,381.00	-278.68	-187.12	332.86	0.91	-0.91	2.89
8,495.00	0.07	264.70	8,471.00	-278.82	-186.94	332.85	0.44	-0.30	161.40
8,586.00	0.42	208.68	8,562.00	-279.12	-187.16	333.21	0.42	0.38	-61.56
8,676.00	0.80	193.59	8,651.99	-280.02	-187.46	334.09	0.45	0.42	-16.77
8,767.00	1.49	191.22	8,742.97	-281.79	-187.84	335.68	0.76	0.76	-2.60
8,857.00	1.80	182.46	8,832.94	-284.35	-188.13	337.79	0.44	0.34	-9.73
8,948.00	2.18	166.15	8,923.88	-287.46	-187.78	339.89	0.75	0.42	-17.92
9,039.00	2.03	149.14	9,014.82	-290.53	-186.54	341.37	0.70	-0.16	-18.69
9,129.00	1.92	150.54	9,104.77	-293.21	-184.98	342.36	0.13	-0.12	1.56
9,219.00	1.57	128.46	9,194.73	-295.29	-183.27	342.79	0.83	-0.39	-24.53
9,310.00	1.81	127.41	9,285.69	-296.94	-181.15	342.63	0.27	0.26	-1.15
9,401.00	2.22	129.05	9,376.63	-298.92	-178.64	342.47	0.45	0.45	1.80
9,491.00	2.21	119.77	9,466.57	-300.88	-175.78	342.05	0.40	-0.01	-10.31
9,581.00	2.14	108.90	9,556.50	-302.29	-172.69	341.06	0.46	-0.08	-12.08
9,672.00	2.05	119.05	9,647.44	-303.63	-169.66	340.07	0.42	-0.10	11.15
9,762.00	1.90	126.56	9,737.39	-305.30	-167.05	339.61	0.33	-0.17	8.34
9,852.00	2.13	138.29	9,827.33	-307.43	-164.74	339.69	0.52	0.26	13.03
9,943.00	2.04	142.12	9,918.27	-309.97	-162.62	340.20	0.18	-0.10	4.21
10,034.00	2.26	134.00	10,009.21	-312.50	-160.34	340.58	0.41	0.24	-8.92
10,124.00	2.39	146.23	10,099.13	-315.29	-158.02	341.15	0.57	0.14	13.59
10,215.00	2.51	138.74	10,190.05	-318.37	-155.65	341.90	0.38	0.13	-8.23
10,305.00	2.33	144.50	10,279.97	-321.34	-153.29	342.57	0.34	-0.20	6.40
10,395.00	2.62	138.22	10,369.89	-324.36	-150.85	343.23	0.44	0.32	-6.98
10,486.00	2.83	136.56	10,460.78	-327.54	-147.92	343.69	0.25	0.23	-1.82
10,576.00	2.80	138.42	10,550.68	-330.80	-144.94	344.17	0.11	-0.03	2.07
10,604.00	2.76	135.62	10,578.64	-331.79	-144.01	344.30	0.51	-0.14	-10.00
LAST SDI MWD PRODUCTION SURVEY									
10,660.00	2.76	135.62	10,634.58	-333.72	-142.12	344.51	0.00	0.00	0.00
SDI PROJECTION TO TD									

Company:	Kerr McGee Oil and Gas Onshore LP	**Local Co-ordinate Reference:**	Well NBU 921-25J4CS
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Site:	NBU 921-25J4 Pad	**MD Reference:**	GL 4959' & RKB 14' @ 4973.00ft (ENSIGN 139)
Well:	NBU 921-25J4CS	**North Reference:**	True
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	OH	**Database:**	EDM5000-RobertS-Local

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,612.00	2,589.50	-232.86	-204.42	FIRST SDI MWD PRODUCTION SURVEY
10,604.00	10,578.64	-331.79	-144.01	LAST SDI MWD PRODUCTION SURVEY
10,660.00	10,634.58	-333.72	-142.12	SDI PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____

SUBMIT AS EMAIL | Print Form

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 921-25J4CS
Qtr/Qtr NWSE Section 25 Township 9S Range 21E
Lease Serial Number UO-1194 ST
API Number 4304751255

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

Date/Time 11/22/2010 14:00 HRS AM ☐ PM ☐

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

- ☑ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 12/30/2010 08:00 HRS AM ☐ PM ☐

BOPE

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

Date/Time _____ _____ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.828.0986 OR LOVEL YOUNG AT 435.781.7051