

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

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER MU 921-19C1A-CMHZ
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME MAVERICK
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE 720 929-6515
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL julie.jacobson@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU0581	11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>	19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1105 FNL 2127 FWL	NENW	30	9.0 S	21.0 E	S
Top of Uppermost Producing Zone	1105 FNL 2127 FWL	NENW	30	9.0 S	21.0 E	S
At Total Depth	2 FNL 2631 FWL	NENW	19	9.0 S	21.0 E	S

21. COUNTY UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet) 472	23. NUMBER OF ACRES IN DRILLING UNIT 2400
25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 925	26. PROPOSED DEPTH MD: 10544 TVD: 4356	
27. ELEVATION - GROUND LEVEL 4858	28. BOND NUMBER WYB000291	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8496

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	12.25	9.625	0 - 2799	36.0	J-55 LT&C	8.4	Type III	420	2.1	12.5
							Type III	410	1.46	14.3
I1	8.75	7	0 - 4683	26.0	HCP-110 LT&C	10.2	Premium Lite High Strength	450	1.92	12.5
							Class G	90	1.16	15.8
L1	6.125	4.5	3783 - 10544	11.6	HCP-110 LT&C	9.5	No Used	0	0.0	0.0
							No Used	0	0.0	0.0

ATTACHMENTS

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

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

NAME Cara Mahler	TITLE Regulatory Analyst I	PHONE 720 929-6029
SIGNATURE	DATE 03/13/2013	EMAIL cara.mahler@anadarko.com
API NUMBER ASSIGNED 43047536880000	APPROVAL  Permit Manager	

Kerr-McGee Oil & Gas Onshore. L.P.**MU 921-19C1A-CMHZ**

Surface: 1105 FNL / 2127 FWL NENW Section 30
 BHL: 2 FNL / 2631 FWL NENW Section 19

T9S R21E

Unitah County, Utah
 Mineral Lease: UTU-0581

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

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

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,592'	Water
Birds Nest	1,854'	Water
Mahogany	2,349'	Water
Lower Green River	4,346'	
TVD	4,356'	
TMD	10,544'	

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

Please refer to the attached Drilling Program

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

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 4356' TVD, approximately equals
2,178 psi

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

Maximum anticipated surface pressure equals approximately 1,220 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

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

9. Variances:

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

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

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

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

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

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

Background

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

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

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

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

Variance for BOPE Requirements

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

Variance for Mud Material Requirements

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

Variance for Special Drilling Operation (surface equipment placement) Requirements

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

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

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

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

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

Variance for FIT Requirements

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

Conclusion

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

10. Other Information:

Please refer to the attached Drilling Program.

DRILLING AND GEOLOGICAL INFORMATION

Based on Survey Plat

PROSPECT/FIELD	Uintah	COUNTY	Uintah	GROUND ELEVATION	GR 4,858'	Source of drilling program:	J. BROOKS
OPERATOR	Kerr McGee	LEASE	MU 921-19C1A-CMHZ	RIG HT.	19.0' KB	Source of geological tops:	Kathryn Schuller
LEASE & WELL NO.	MU 921-19C1A-CMHZ	STATE	Utah	BOTTOM HOLE LOCATION	2' FNL 2631' FWL	Source of log information:	
SURFACE LOCATION	1105' FNL 2127' FWL			Section 19	T9S R21E		
LAT/LONG (NAD83)	40.011185 -109.597602	BOTTOM HOLE LAT/LONG (NAD83)	40.028815 -109.596159			SURFACE N/S	1105' FNL
LAT/LONG (NAD27)	40.011220 -109.596915	BOTTOM HOLE LAT/LONG (NAD27)	40.028851 -109.595469			SURFACE E/W	2127' FWL
AZIMUTH OF HORIZONTAL FORM @ TD (PILOT HOLE)	3.600000	STRIKE/DIP OBJECTIVE FORMATION				7" CSG SHOE N/S (REF SURF)	-572'
API NUMBER		FORM @ TD (HORIZONTAL HOLE)	Green River Lower			7" CSG SHOE E/W (REF SURF)	36'
		AFE NUMBER				7" CSG SHOE N/S (REF LL)	533' FNL
						7" CSG SHOE E/W (REF LL)	2163' FWL

	Based on 4,877' KB			Comments LOGGING PROGRAM: Interval Type Log Surf Csg -TD Mudlogging Two-man unit mud logging HZ Kickoff - Landing MWD/GR GR HZ Lateral MWD/LWD Inc/Az/GR PCL Triple Combo & FMI - (One tool string)
	GEOLOGICAL TOPS:			
	Formation	MD	TVD	
	Green River	1,592'	1,592'	
	Birds Nest	1,854'	1,854'	
	Mahogany	2,349'	2,349'	
	GR lower	4,576'	4,346'	
	9 5/8" CASING DEPTH			
	MD:	2,799'		
	TVD:	2,799'	4,356'	
	HZ proposed Landing TVD @ 572' VS			
	7" CEMENT TOP			
	MD:	0'	10,544'	
	TVD:	0'	4,356'	
	MUD PROGRAM:			
Mud Type	Interval	Weight		
Fresh Water	0' - 2,799' MD	8.4		
Fresh Water	2,799' MD - 3,783' MD	9		
FW PHPA (Directional)	3,783' MD - 4,683' MD	10.2		
FW PHPA/Flowzan (Horizontal)	4,683' MD - 10,544' MD	9.5		
KOP	3,783'			
TVD/MD:	3,783'			
CASING & CEMENT PROGRAM:				
Surface Casing:	9.625"	36.0		
Intermediate Casing:	7.000"	26.0		
4 1/2" LINER TOP	3,783'			
MD:	3,783'			
TVD:	3,783'			
Production Csg:	4.500"	11.6		
4 1/2" LINER DEPTH	10,544'			
MD:	10,544'			
TVD:	4,356'			

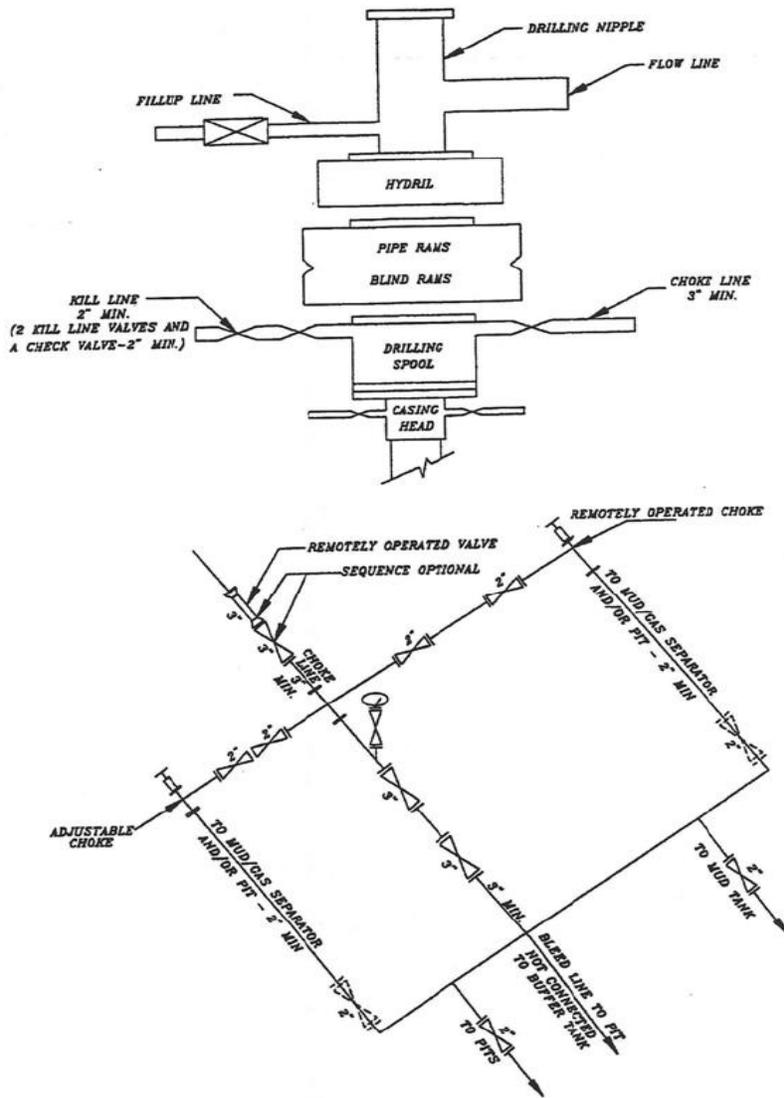
Lateral Length 5,861'

TOE / 4 1/2" LINER SETTING DEPTH:

MD: 10,544' TVD: 4,356'

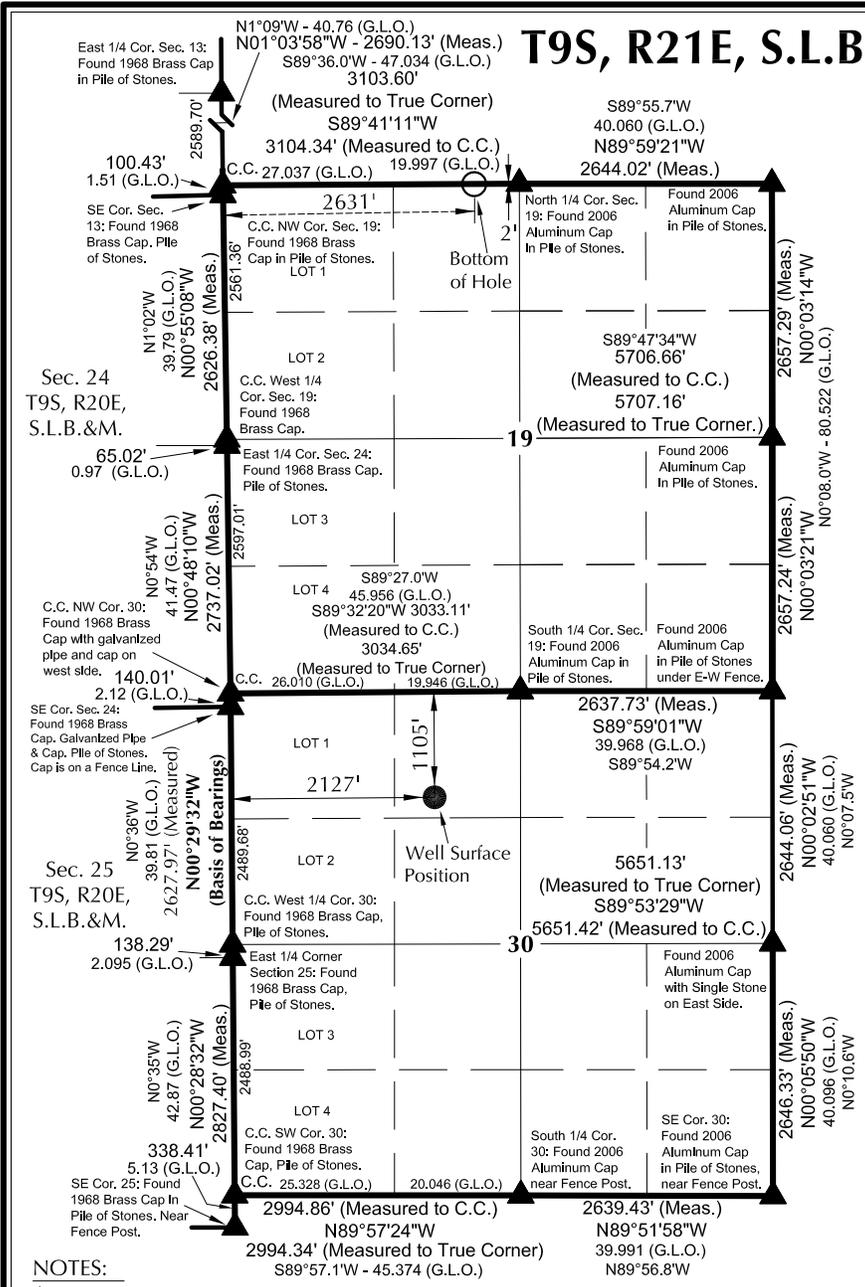
PILOT HOLE:	MD: 0'	TVD: 0'	BOTTOM HOLE PRESSURE	Formation:	Green River	2,444 psi @ 5,200'	or Gradient:	0.47 psi/ft
							or Gradient:	psi/ft
			Prepared by:	J. BROOKS	Date:	03/04/13	Doc:	Well Draft Drilling Diagram.xls

EXHIBIT A
MU 921-19C1A-CMHZ



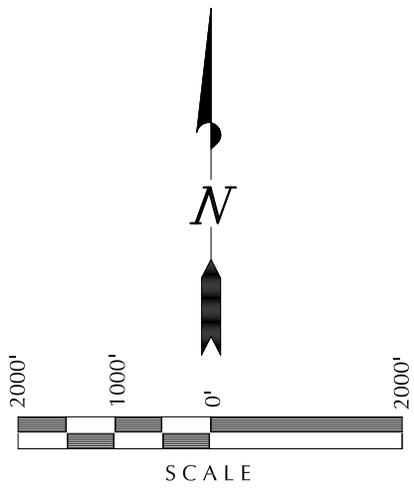
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

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



MU 921-19C1A-CMHZ (Surface Position) NAD 83 LATITUDE = 40.011185° (40° 00' 40.265") LONGITUDE = 109.597602° (109° 35' 51.369") NAD 27 LATITUDE = 40.011220° (40° 00' 40.392") LONGITUDE = 109.596912° (109° 35' 48.884")
MU 921-19C1A-CMHZ (Bottom Hole) NAD 83 LATITUDE = 40.028815° (40° 01' 43.735") LONGITUDE = 109.596159° (109° 35' 46.173") NAD 27 LATITUDE = 40.028851° (40° 01' 43.863") LONGITUDE = 109.595469° (109° 35' 43.687")

WELL LOCATION:
MU 921-19C1A-CMHZ
 ELEV. UNGRADED GROUND = 4861.7'



- NOTES:**
- ▲ = Section Corners Located
 - 1. Well footages are measured at right angles to the Section Lines.
G.L.O. distances are shown in feet or chains.
 - 2. 1 chain = 66 feet.
 - 3. The Bottom of hole bears N03°41'15"E 6437.01' from the Surface Position.
 - 4. NAD 83 Latitude & Longitude are (CORS 96)(EPOCH:2002).
 - 5. Bearings and Distances are based upon a Local Cartesian Grid, oriented to Geodetic North at the North 1/4 Corner of Section 8, T10S, R22E, S.L.B.&M. The Grid having a mean project height of 5300'. Lineal units used are U.S. Survey Foot.
 - 6. Basis of elevation is Tri-Sta "Two Water" located in Lot 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'.

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

WELL PAD: MU 921-30C

MU 921-19C1A-CMHZ
WELL PLAT
2' FNL, 2631' FWL (Bottom Hole)
NE 1/4 NW 1/4 OF SECTION 19, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.

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

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.

9-28-12
 No. 6028691
JOHN R. LAUGH
 PROFESSIONAL LAND SURVEYOR
 REGISTRATION No. 6028691
 STATE OF UTAH

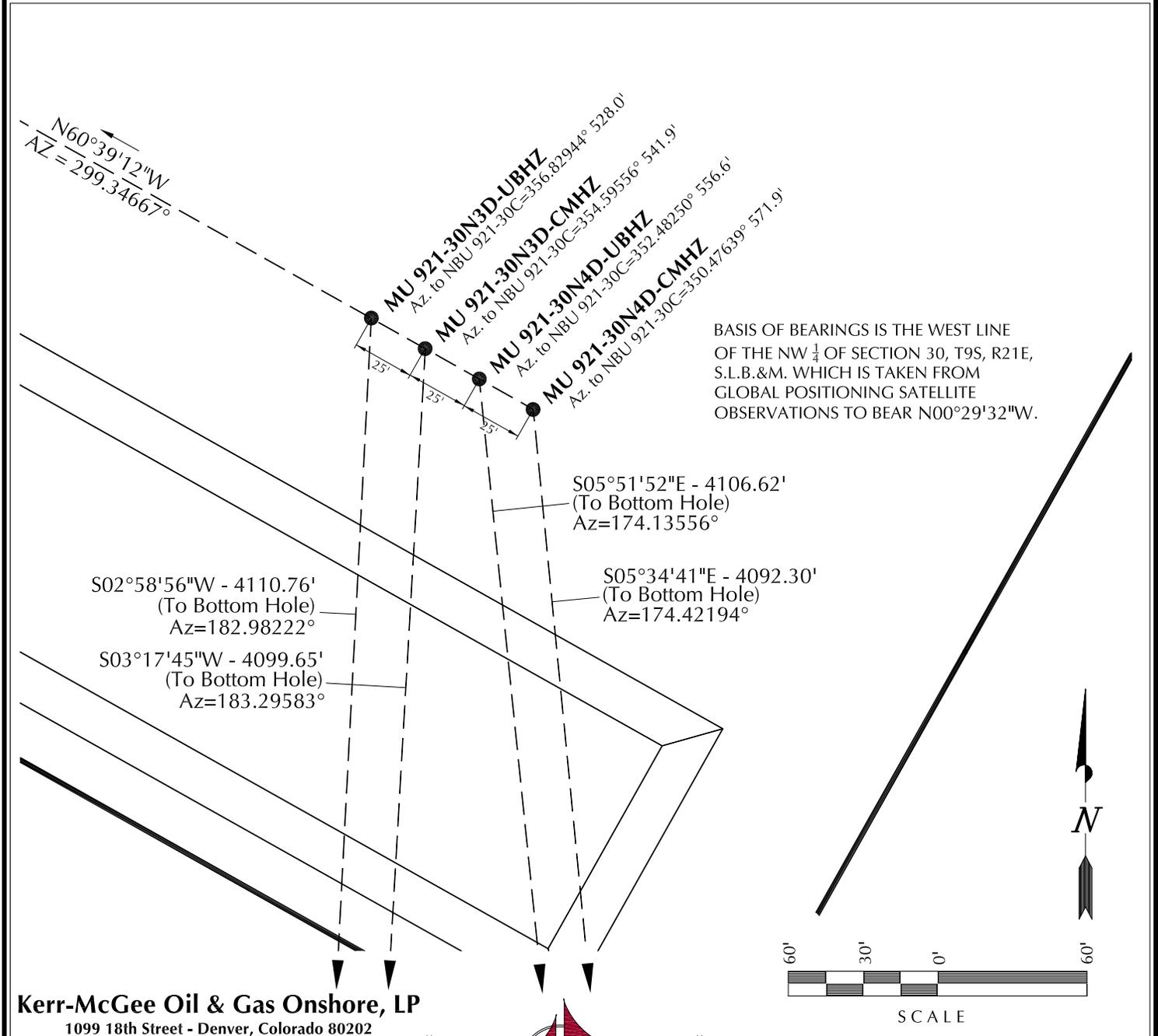
TIMBERLINE (435) 789-1365
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 9-7-12	SURVEYED BY: A.F.	SHEET NO: 5
DATE DRAWN: 9-21-12	DRAWN BY: T.J.R.	
SCALE: 1" = 2000'		5 OF 20

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
MU 921-30N4D-CMHZ	40°00'39.419"	109°35'49.407"	40°00'39.546"	109°35'46.922"	1192' FNL 2279' FWL	39°59'59.186"	109°35'44.219"	39°59'59.312"	109°35'41.734"	12' FSL 2642' FWL
MU 921-30N4D-UBHZ	40°00'39.540"	109°35'49.687"	40°00'39.667"	109°35'47.202"	1180' FNL 2257' FWL	39°59'59.186"	109°35'44.219"	39°59'59.312"	109°35'41.734"	12' FSL 2642' FWL
MU 921-30N3D-CMHZ	40°00'39.660"	109°35'49.967"	40°00'39.787"	109°35'47.482"	1167' FNL 2236' FWL	39°59'59.220"	109°35'52.917"	39°59'59.347"	109°35'50.432"	16' FSL 1965' FWL
MU 921-30N3D-UBHZ	40°00'39.782"	109°35'50.248"	40°00'39.909"	109°35'47.763"	1155' FNL 2214' FWL	39°59'59.220"	109°35'52.917"	39°59'59.347"	109°35'50.432"	16' FSL 1965' FWL

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
MU 921-30N4D-CMHZ	-4072.9'	397.8'	MU 921-30N4D-UBHZ	-4085.1'	419.6'	MU 921-30N3D-CMHZ	-4092.9'	-235.7'	MU 921-30N3D-UBHZ	-4105.2'	-213.9'



BASIS OF BEARINGS IS THE WEST LINE OF THE NW 1/4 OF SECTION 30, T9S, R21E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°29'32"W.

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

WELL PAD - MU 921-30C

WELL PAD INTERFERENCE PLAT
MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
LOCATED IN SECTION 30, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
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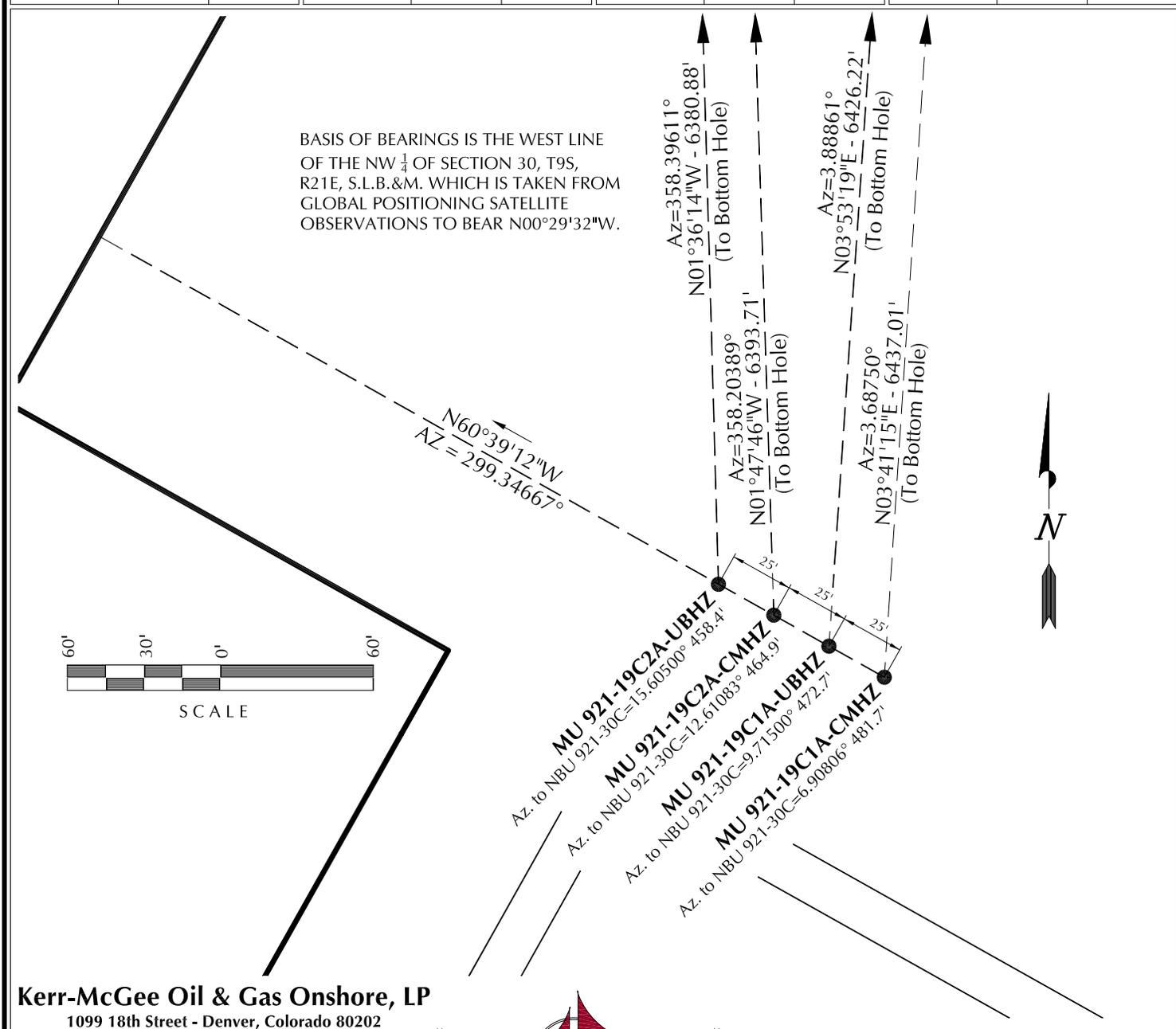
TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 9-7-12	SURVEYED BY: A.F.	SHEET NO: 9A 9A OF 20
DATE DRAWN: 9-21-12	DRAWN BY: T.J.R.	
SCALE: 1" = 60'		Date Last Revised:

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
MU 921-19C1A-CMHZ	40°00'40.265"	109°35'51.369"	40°00'40.392"	109°35'48.884"	1105' FNL 2127' FWL	40°01'43.735"	109°35'46.173"	40°01'43.863"	109°35'43.687"	2' FNL 2631' FWL
MU 921-19C1A-UBHZ	40°00'40.385"	109°35'51.650"	40°00'40.512"	109°35'49.165"	1093' FNL 2105' FWL	40°01'43.735"	109°35'46.173"	40°01'43.863"	109°35'43.687"	2' FNL 2631' FWL
MU 921-19C2A-CMHZ	40°00'40.506"	109°35'51.929"	40°00'40.633"	109°35'49.444"	1080' FNL 2084' FWL	40°01'43.641"	109°35'54.628"	40°01'43.768"	109°35'52.142"	7' FNL 1973' FWL
MU 921-19C2A-UBHZ	40°00'40.626"	109°35'52.210"	40°00'40.753"	109°35'49.724"	1068' FNL 2062' FWL	40°01'43.641"	109°35'54.628"	40°01'43.768"	109°35'52.142"	7' FNL 1973' FWL
NBU 921-30C	40°00'44.990"	109°35'50.634"	40°00'45.117"	109°35'48.149"	628' FNL 2189' FWL					

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
MU 921-19C1A-CMHZ	6423.7'	414.0'	MU 921-19C1A-UBHZ	6411.4'	435.8'	MU 921-19C2A-CMHZ	6390.6'	-200.4'	MU 921-19C2A-UBHZ	6378.4'	-178.6'



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

WELL PAD - MU 921-30C

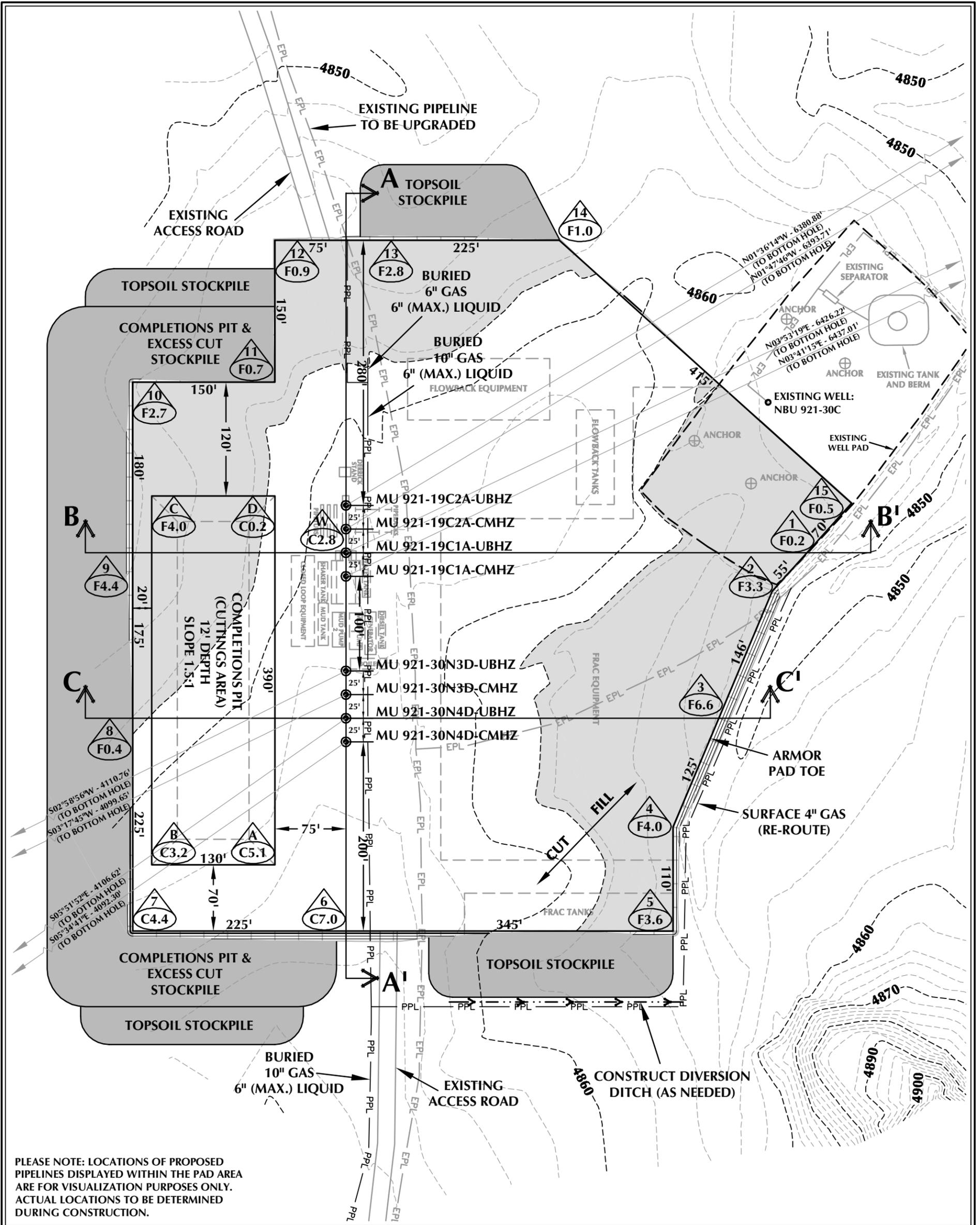
WELL PAD INTERFERENCE PLAT
MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
LOCATED IN SECTION 30, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH.



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2155 North Main Street
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ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 9-7-12	SURVEYED BY: A.F.	SHEET NO: 9B
DATE DRAWN: 9-21-12	DRAWN BY: T.J.R.	
SCALE: 1" = 60'	Date Last Revised:	9B OF 20



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 - MU 921-30C DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 4861.2'
 FINISHED GRADE ELEVATION = 4858.4'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 10.14 ACRES
 TOTAL DISTURBANCE AREA = 13.30 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD - MU 921-30C
 WELL PAD - LOCATION LAYOUT
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH



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

WELL PAD QUANTITIES
 TOTAL CUT FOR WELL PAD = 22,325 C.Y.
 TOTAL FILL FOR WELL PAD = 13,825 C.Y.
 TOPSOIL @ 6" DEPTH = 7,723 C.Y.
 EXCESS MATERIAL = 8,500 C.Y.

COMPLETIONS PIT QUANTITIES
 TOTAL CUT FOR COMPLETIONS PIT
 +/- 18,570 C.Y.
 COMPLETIONS PIT CAPACITY
 (2' OF FREEBOARD)
 +/- 71,780 BARRELS

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

WELL PAD LEGEND

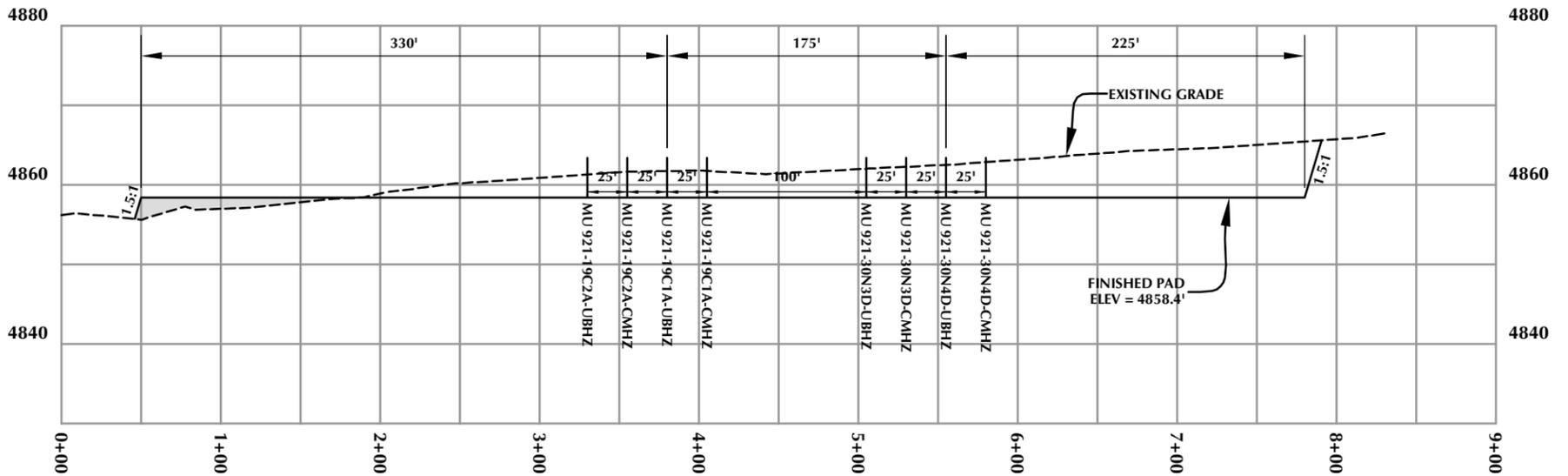
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL - PROPOSED PIPELINE
- EPL - EXISTING PIPELINE

HORIZONTAL 0 50' 100' 1" = 100'

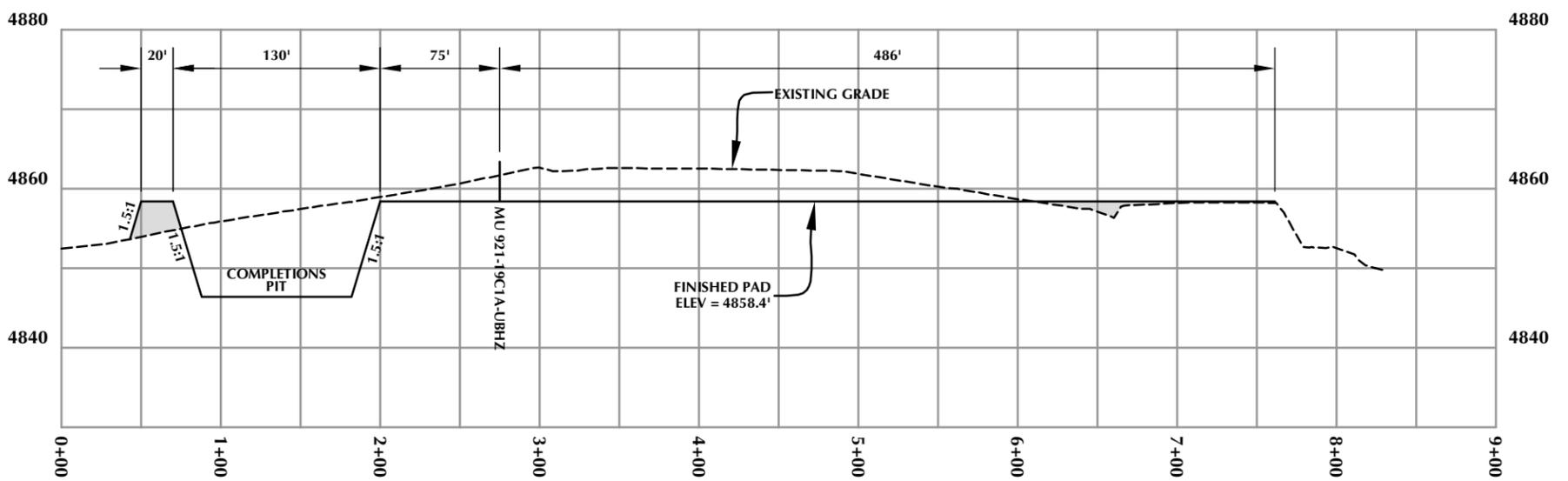
2' CONTOURS

SCALE: 1"=100' DATE: 9/28/12 SHEET NO: 10 OF 20

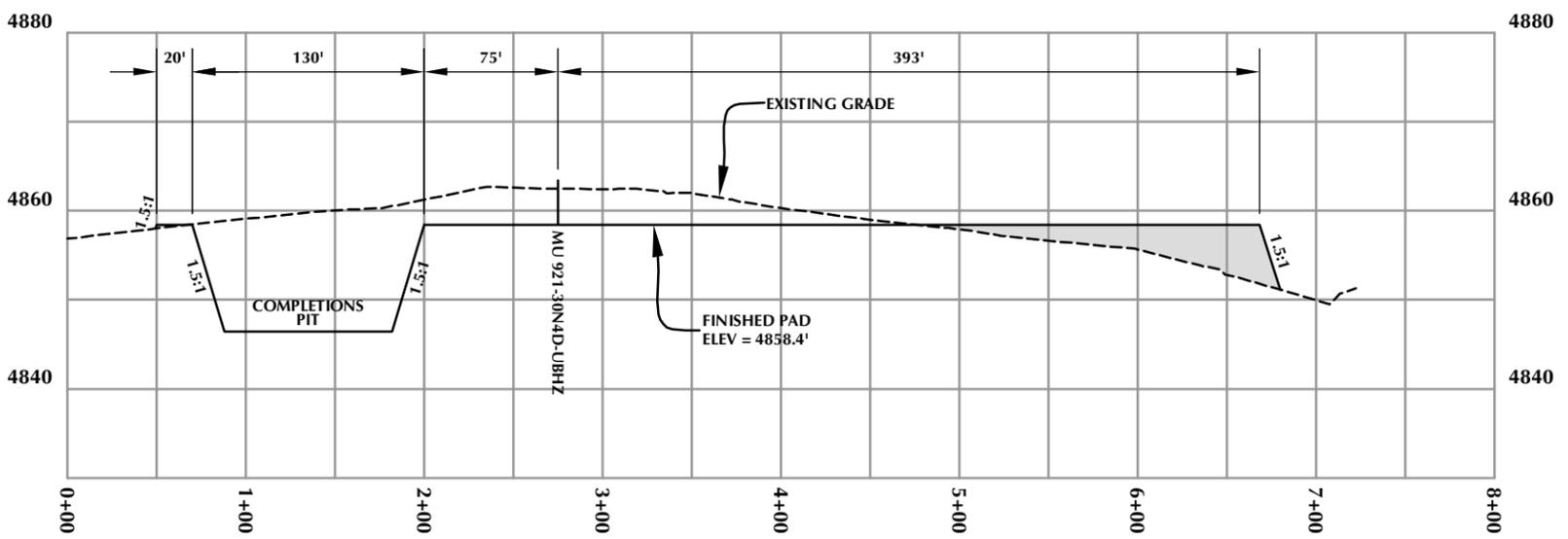
REVISED:



CROSS SECTION A-A'



CROSS SECTION B-B'



CROSS SECTION C-C'

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1099 18th Street - Denver, Colorado 80202

WELL PAD - MU 921-30C

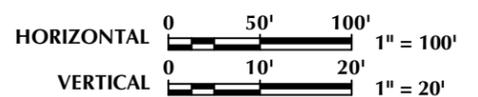
WELL PAD - CROSS SECTIONS

MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
LOCATED IN SECTION 30, T9S, R21E,
S.L.B.&M., UINTAH COUNTY, UTAH

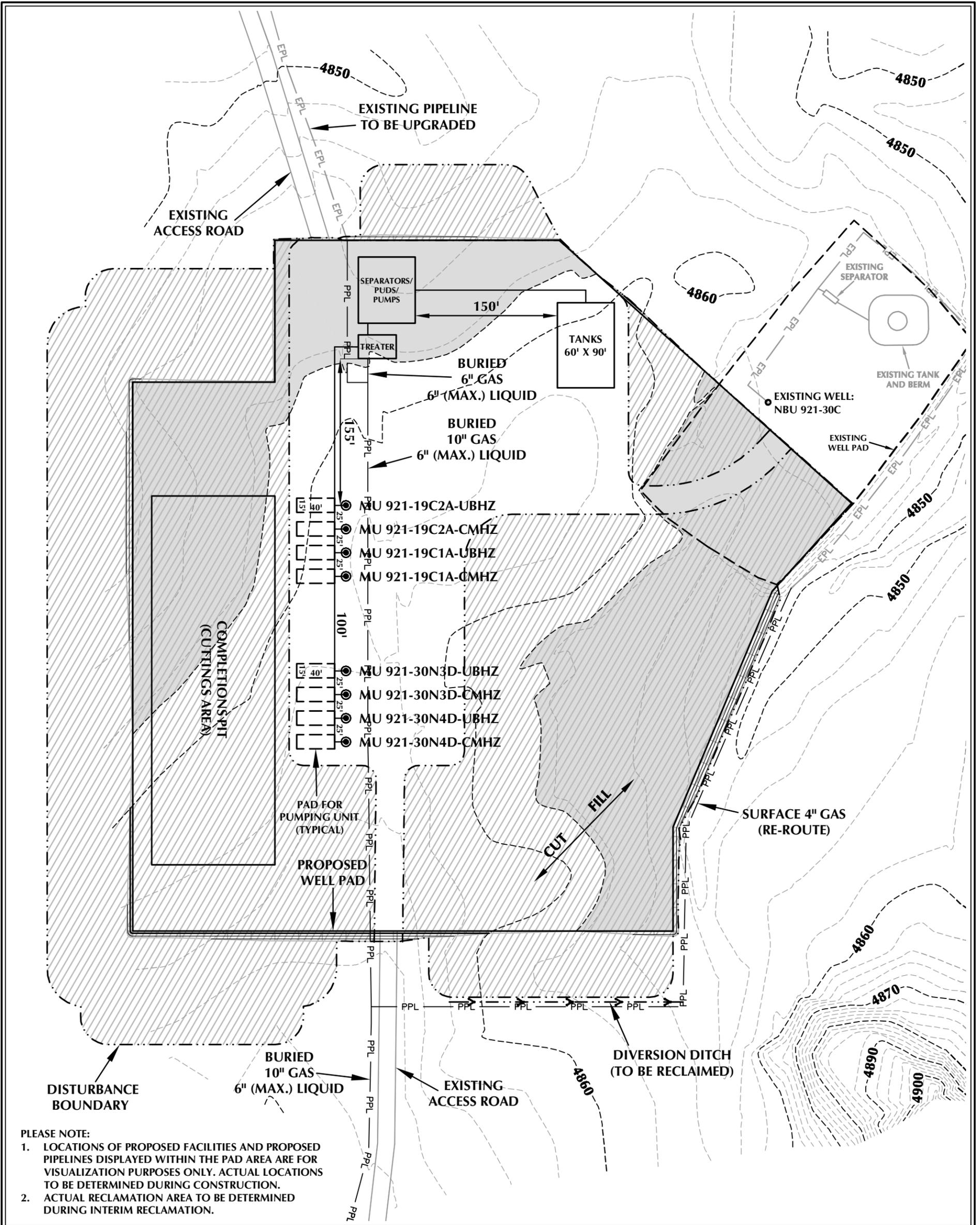


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Fax 307-674-0182

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Scale: 1"=100'	Date: 9/28/12	SHEET NO:
REVISED:		11 11 OF 20



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

WELL PAD - WELL PAD - MU 921-30C RECLAMATION DESIGN SUMMARY

TOTAL DISTURBANCE AREA = 13.30 ACRES (INCLUDING EXISTING)
 RECLAMATION AREA = 9.58 ACRES
 TOTAL WELL PAD AREA AFTER RECLAMATION = 3.72 ACRES

Kerr-McGee Oil & Gas Onshore, LP
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WELL PAD - MU 921-30C
 WELL PAD - RECLAMATION LAYOUT
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH



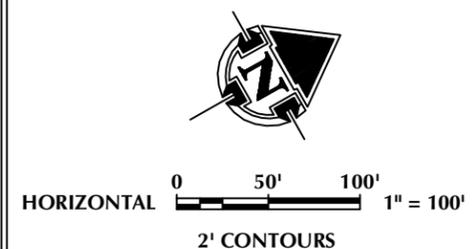
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(435) 789-1365

WELL PAD LEGEND

	EXISTING WELL LOCATION
	PROPOSED WELL LOCATION
	EXISTING CONTOURS (2' INTERVAL)
	PROPOSED CONTOURS (2' INTERVAL)
	PROPOSED PIPELINE
	EXISTING PIPELINE
	RECLAMATION AREA



SCALE: 1"=100' DATE: 9/28/12 SHEET NO:
 REVISID: **12** 12 OF 20

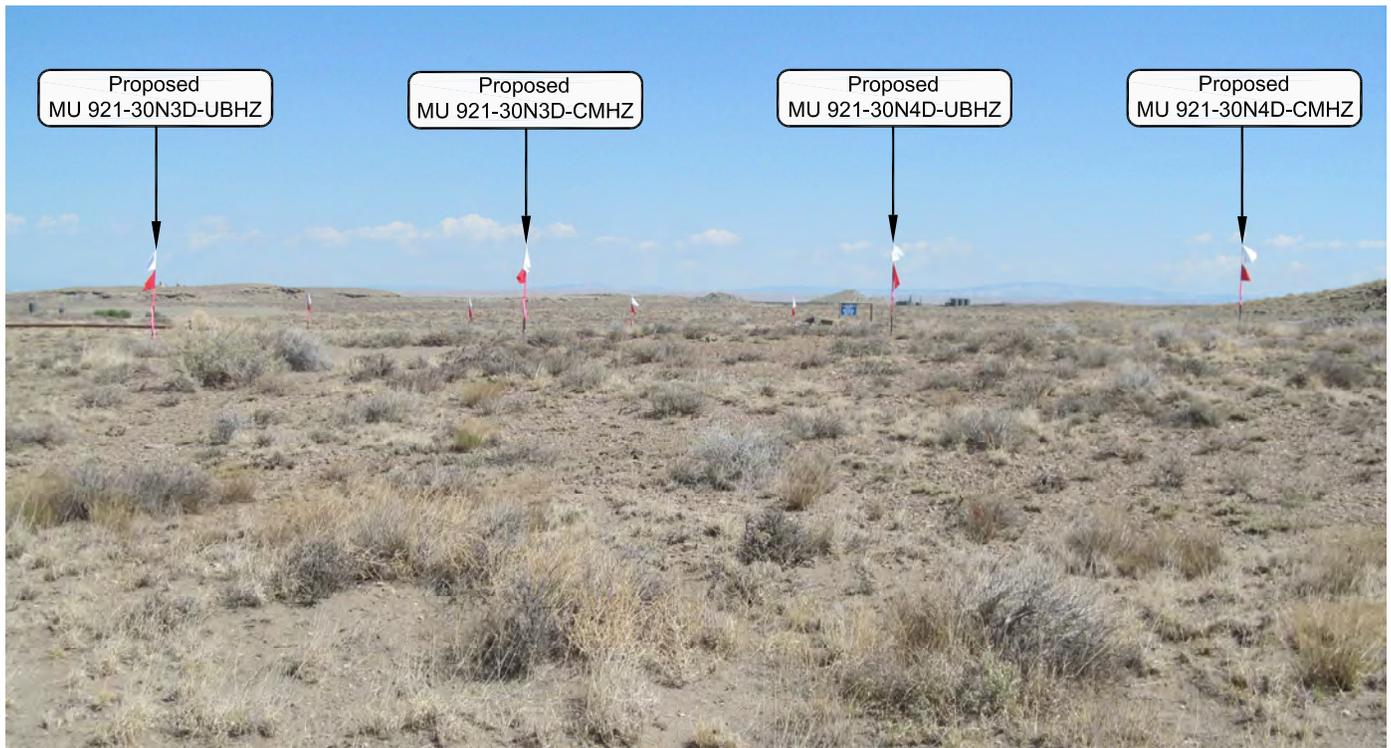


PHOTO VIEW: FROM LOCATION STAKES TO CORNER #3

CAMERA ANGLE: NORTHEASTERLY

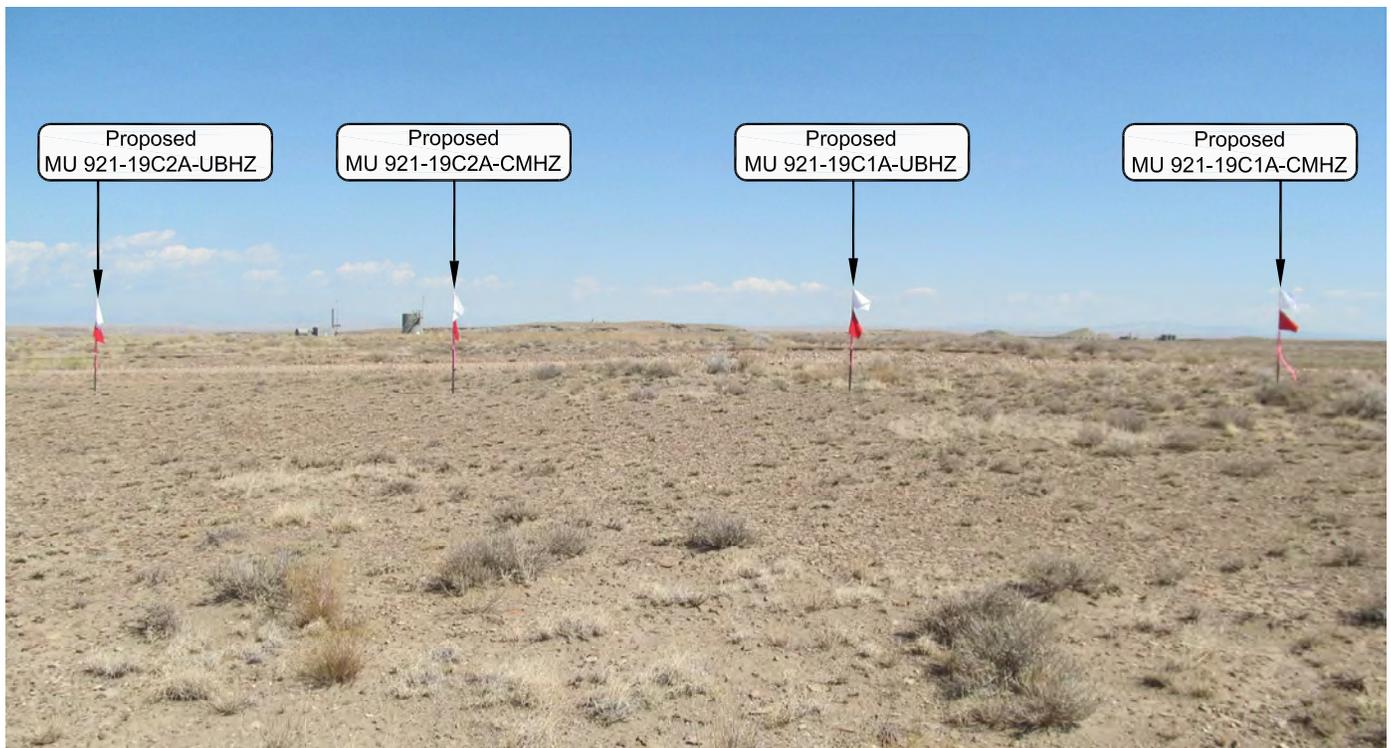


PHOTO VIEW: FROM LOCATION STAKES TO CORNER #1

CAMERA ANGLE: NORTHEASTERLY

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

WELL PAD - MU 921-30C

LOCATION PHOTOS
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH.



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 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 9-7-12	PHOTOS TAKEN BY: A.F.	SHEET NO: 13A
DATE DRAWN: 9-21-12	DRAWN BY: T.J.R.	
Date Last Revised:		13A OF 20



Existing Access Road

PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: NORTHWESTERLY

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 1099 18th Street - Denver, Colorado 80202

WELL PAD - MU 921-30C

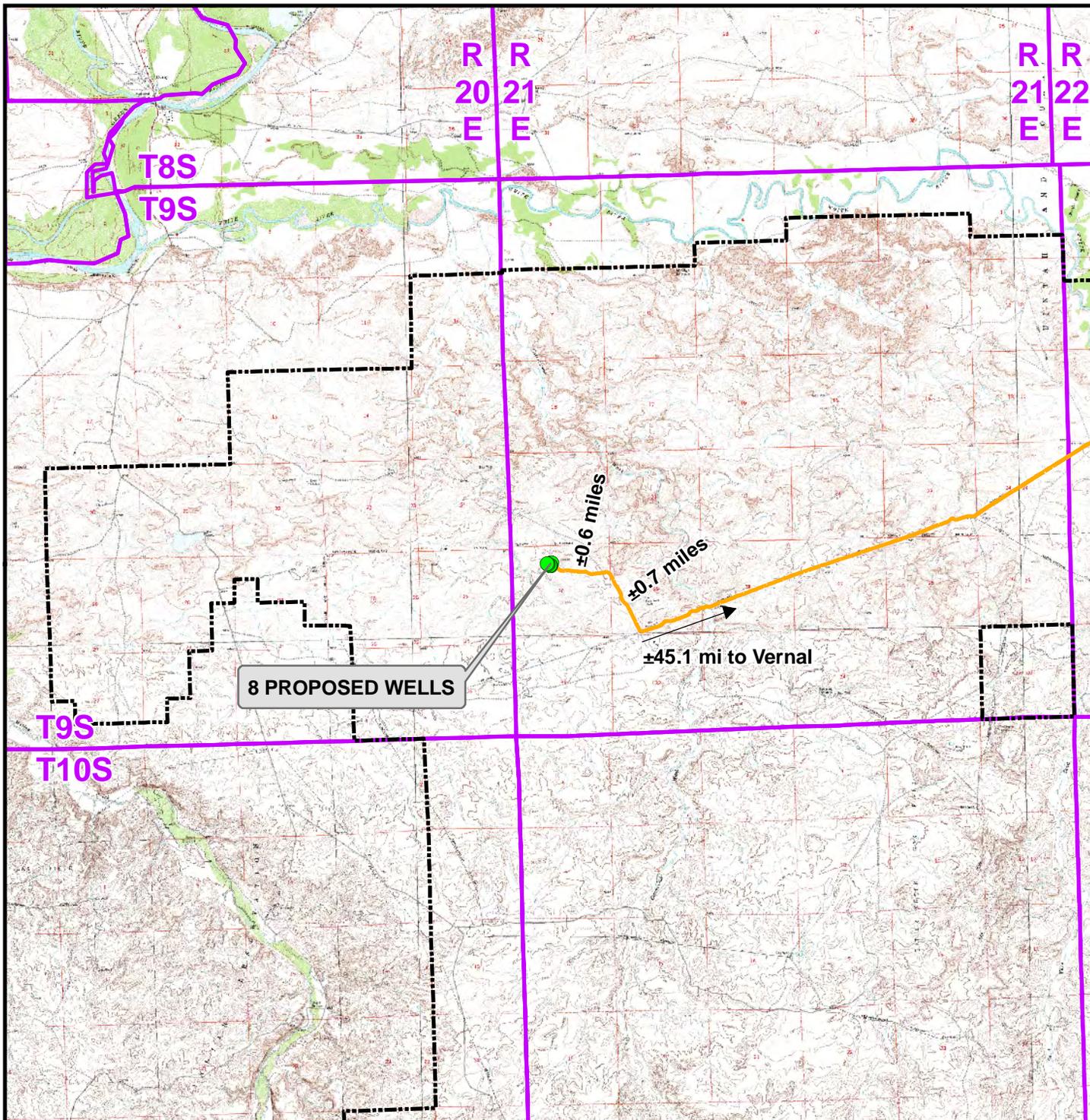
LOCATION PHOTOS
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E,
 S.L.B.&M., UINTAH COUNTY, UTAH.



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DATE PHOTOS TAKEN: 9-7-12	PHOTOS TAKEN BY: A.F.	SHEET NO: 13B
DATE DRAWN: 9-21-12	DRAWN BY: T.J.R.	
Date Last Revised:		13B OF 20



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Legend

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

Distance From Well Pad - MU 921-30C To Unit Boundary: ±11,854ft

WELL PAD - MU 921-30C

TOPO A
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

**Kerr-McGee Oil &
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 Fax 307-674-0182



SCALE: 1:100,000

NAD83 USP Central

SHEET NO:

DRAWN: TL

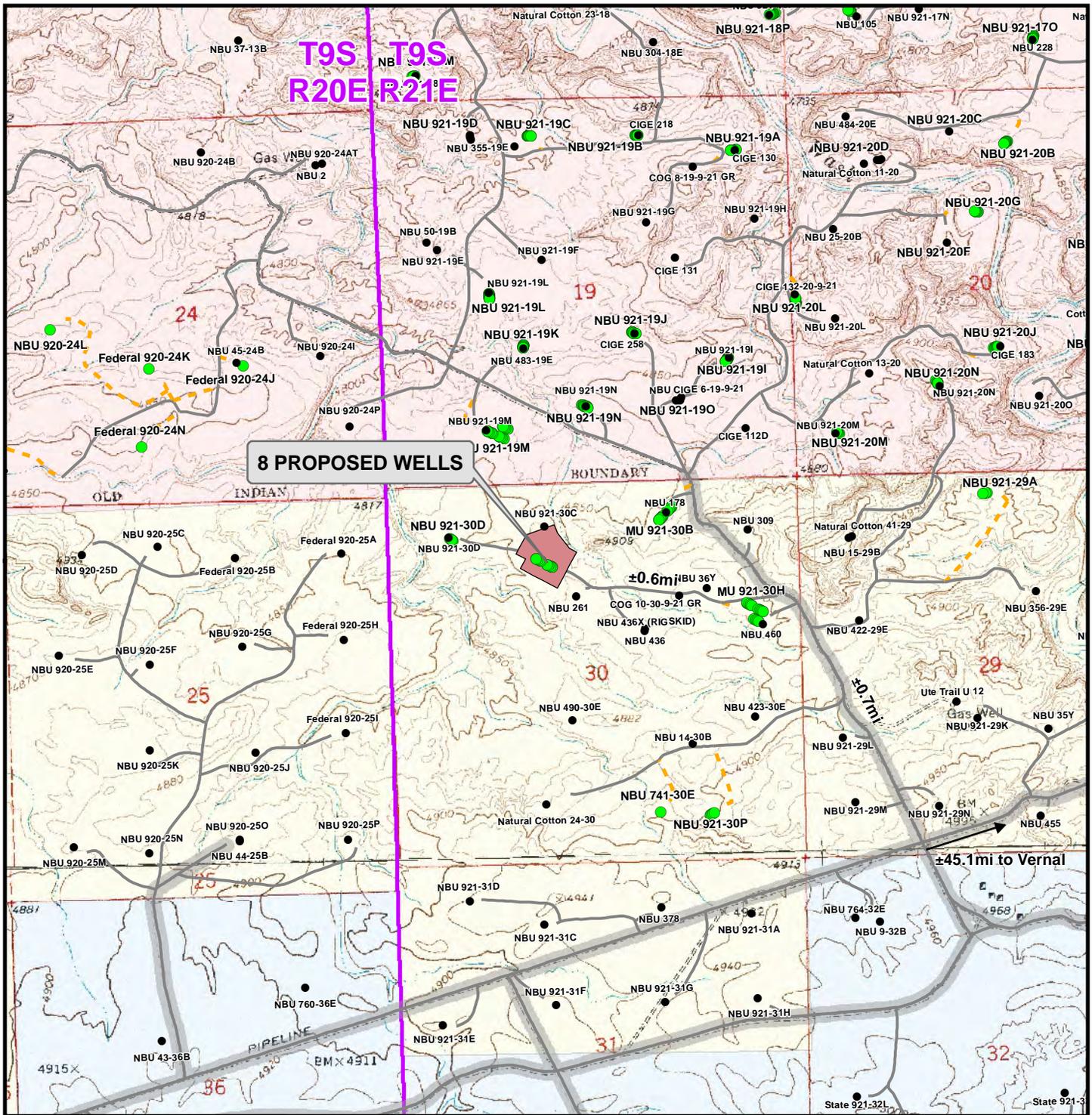
DATE: 28 Sep 2012

14

REVISED:

DATE:

14 OF 20



8 PROPOSED WELLS

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Legend

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

Total Proposed Road Length: ±0ft

WELL PAD - MU 921-30C

TOPO B
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

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

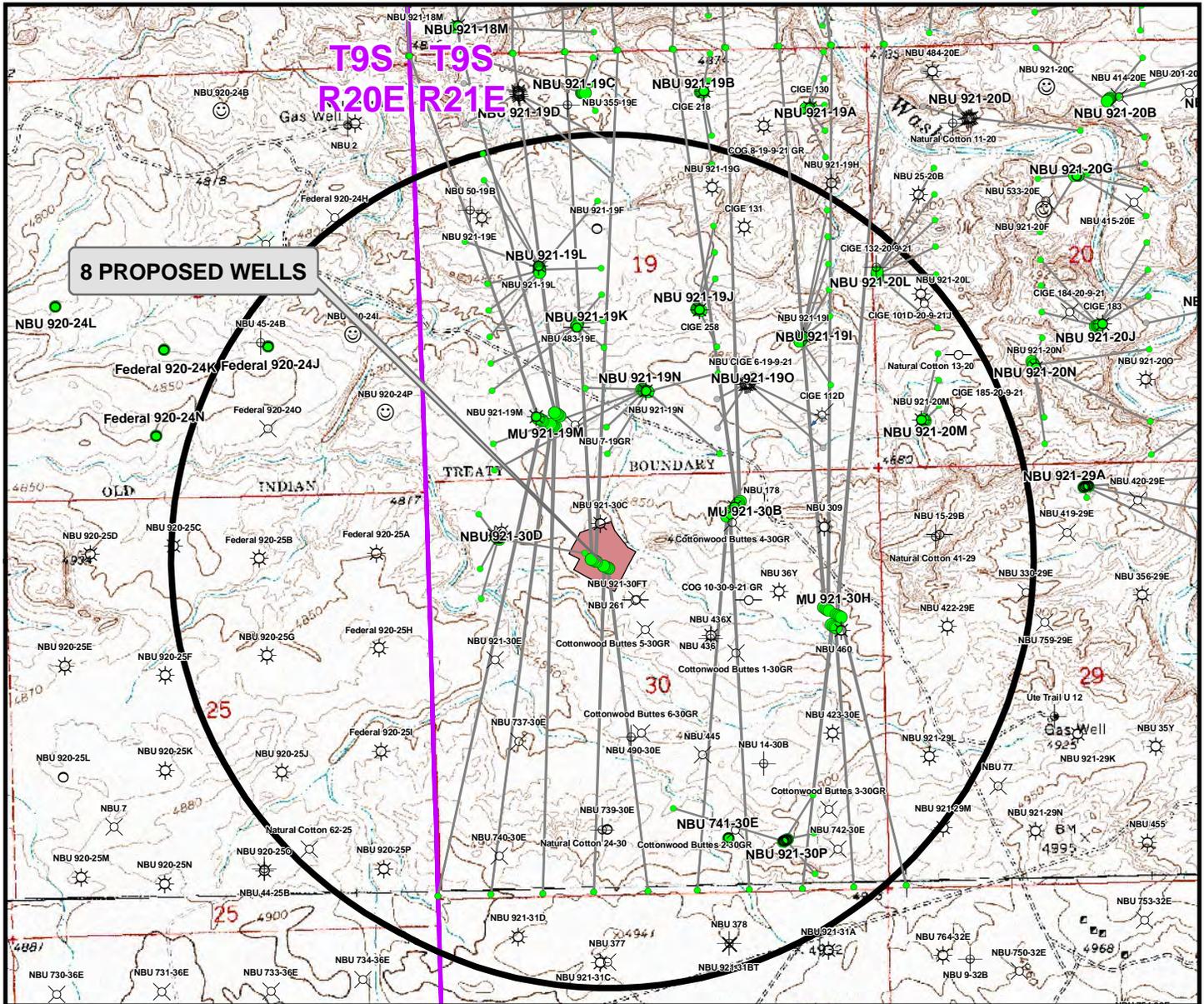
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 Denver, Colorado 80202



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SCALE: 1" = 2,000ft	NAD83 USP Central	SHEET NO:
DRAWN: TL	DATE: 28 Sep 2012	15
REVISED:	DATE:	



8 PROPOSED WELLS

Well locations derived from Utah Division of Oil, Gas and Mining (UDOGM) (oilgas.ogm.utah.gov).
 The estimated distances from proposed bore locations to the nearest existing bore locations are based on UDOGM data.

Proposed Well	Nearest Well Bore	Footage
MU 921-30N4D-CMHZ	Natural Cotton 24-30	964ft
MU 921-30N4D-UBHZ	Natural Cotton 24-30	964ft
MU 921-30N3D-CMHZ	Natural Cotton 24-30	793ft
MU 921-30N3D-UBHZ	Natural Cotton 24-30	793ft

Proposed Well	Nearest Well Bore	Footage
MU 921-19C1A-CMHZ	NBU 355-19E	925ft
MU 921-19C1A-UBHZ	NBU 355-19E	925ft
MU 921-19C2A-CMHZ	NBU 355-19E	652ft
MU 921-19C2A-UBHZ	NBU 355-19E	652ft

Legend

- Well - Proposed
- Well Path
- ☀ Producing
- ⊕ Deferred
- ☀ Active Injector
- ⊕ Plugged & Abandoned
- Bottom Hole - Proposed
- Well Pad
- ☺ Spudded
- ⊗ Cancelled
- ☀ Location Abandoned
- Bottom Hole - Existing
- ◻ Well - 1 Mile Radius
- APD Approved
- ⊖ Temporarily Abandoned
- ⊖ Shut-In
- ⊖ Preliminary Location

WELL PAD - MU 921-30C

TOPO C
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

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 Gas Onshore L.P.**
 1099 18th Street
 Denver, Colorado 80202

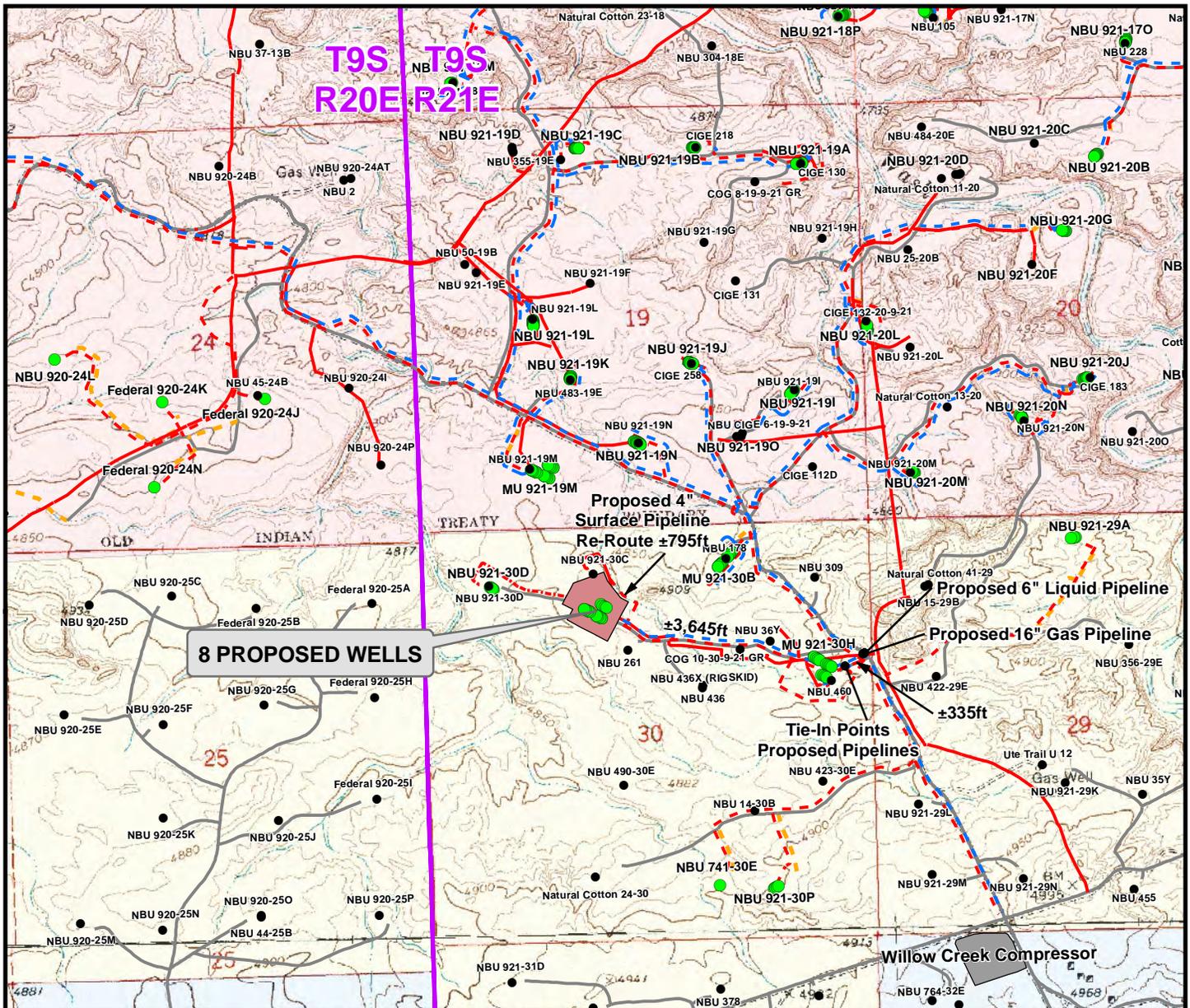


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SCALE: 1" = 2,000ft	NAD83 USP Central	16
DRAWN: TL	DATE: 28 Sep 2012	
REVISED:	DATE:	

SHEET NO:
16 OF 20

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8 PROPOSED WELLS

Proposed 4\"/>

Proposed 6\"/>

Proposed 16\"/>

**Tie-In Points
Proposed Pipelines**

Willow Creek Compressor

Proposed Liquid Pipeline	Length
Buried 6" (Max.) (Separator to 921-30D Intersection)	±10ft
Buried 6" (Max.) (921-30D Intersection to 921-30H Intersection)	±3,645ft
TOTAL PROPOSED BURIED LIQUID PIPELINE =	±3,655ft

Proposed Gas Pipeline	Length
Buried 6" (Meter House to 921-30D Intersection)	±10ft
Buried 10" (921-30D Intersection to 921-30H Intersection)	±3,645ft
Surface 4" (Pipeline Re-Route)	±795ft
TOTAL PROPOSED BURIED GAS PIPELINE =	±3,655ft
TOTAL PROPOSED SURFACE GAS PIPELINE =	±795ft

Legend

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

WELL PAD - MU 921-30C

TOPO D
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

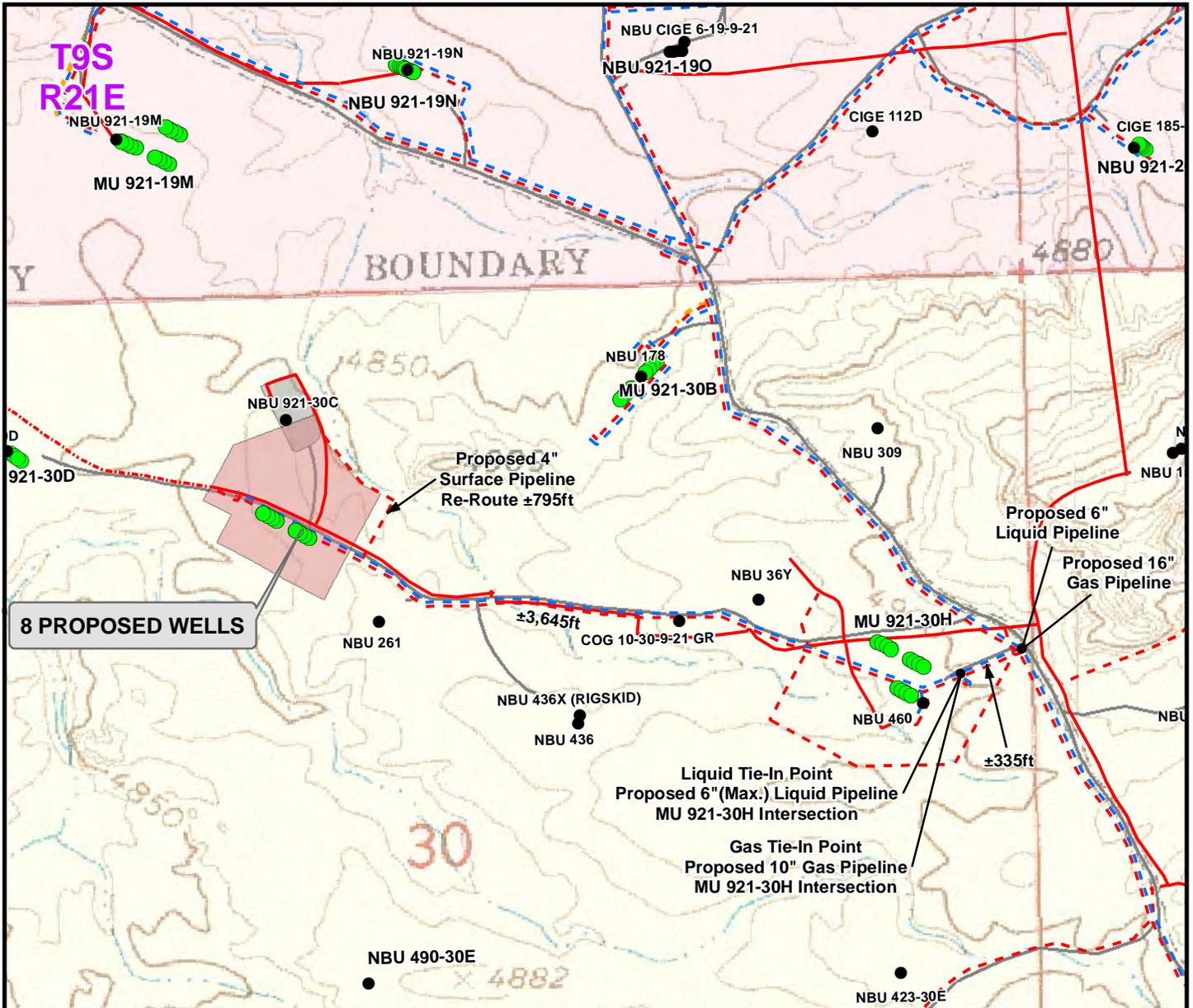
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 Denver, Colorado 80202



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SCALE: 1" = 2,000ft	NAD83 USP Central	17
DRAWN: TL	DATE: 28 Sep 2012	
REVISED:	DATE:	

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8 PROPOSED WELLS

Proposed Liquid Pipeline	Length
=====	=====
Buried 6" (Max.) (Separator to 921-30D Intersection)	±10ft
Buried 6" (Max.) (921-30D Intersection to 921-30H Intersection)	±3,645ft
TOTAL PROPOSED BURIED LIQUID PIPELINE =	±3,655ft

Proposed Gas Pipeline	Length
=====	=====
Buried 6" (Meter House to 921-30D Intersection)	±10ft
Buried 10" (921-30D Intersection to 921-30H Intersection)	±3,645ft
Surface 4" (Pipeline Re-Route)	±795ft
TOTAL PROPOSED BURIED GAS PIPELINE =	±3,655ft
TOTAL PROPOSED SURFACE GAS PIPELINE =	±795ft

Legend

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

WELL PAD - MU 921-30C

TOPO D2 (PAD & PIPELINE DETAIL)
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

Kerr-McGee Oil & Gas Onshore L.P.

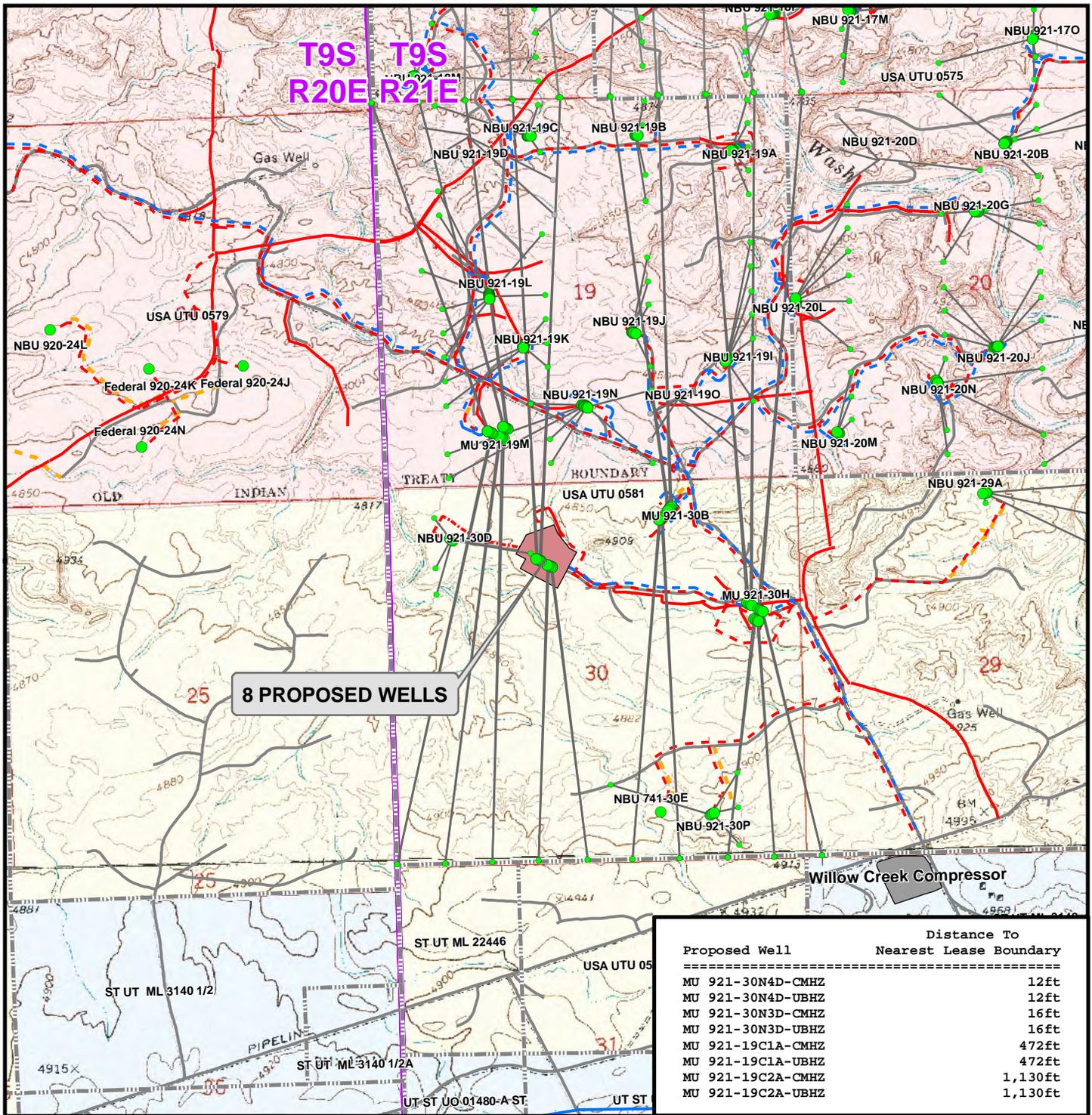
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SCALE: 1" = 750ft	NAD83 USP Central	18
DRAWN: TL	DATE: 28 Sep 2012	
REVISED:	DATE:	

SHEET NO:
18 OF 20

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Legend

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

WELL PAD - MU 921-30C

TOPO E
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

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SCALE: 1" = 2,000ft	NAD83 USP Central	19
DRAWN: TL	DATE: 28 Sep 2012	
REVISED:	DATE:	

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – MU 921-30C
WELL – MU 921-30N4D-CMHZ, MU 921-30N4D -UBHZ,
MU 921-30N3D -CMHZ, MU 921-30N3D -UBHZ,
MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
Section 30, 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 17.7 miles to a Class D County Road to the southwest. Exit right and proceed in a southwesterly direction along the Class D County Road approximately 3.9 miles to a second Class D County Road to the northwest. Exit right and proceed in a northwesterly direction along the second Class D County Road approximately 0.7 miles to a service road to the west. Exit left and proceed in a westerly direction along the service road approximately 0.6 miles to the proposed well location.

Total distance from Vernal, Utah, to the proposed well location is approximately 46.4 miles in a southerly direction.



Site: MU 921-30C PAD
 Well: MU 921-19C1A-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: MU 921-19C1A-CMHZ

GL 4858 & KB 19						
@ 4877.00ft (ASSUMED)						
+N-S	+E-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	14533223.24	2033305.69	40.0112200	-109.5969120	

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	4356.00	6421.22	404.01	14539650.01	2033608.54	40.0288510	-109.5954690	Point
- plan hits target center								

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3783.04	0.00	0.00	3783.04	0.00	0.00	0.00	0.00	0.00
4683.04	90.00	3.60	4356.00	571.83	35.98	10.00	3.60	572.96
10544.00	90.00	3.60	4356.00	6421.22	404.01	0.00	0.00	6433.92 PBHL

PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N

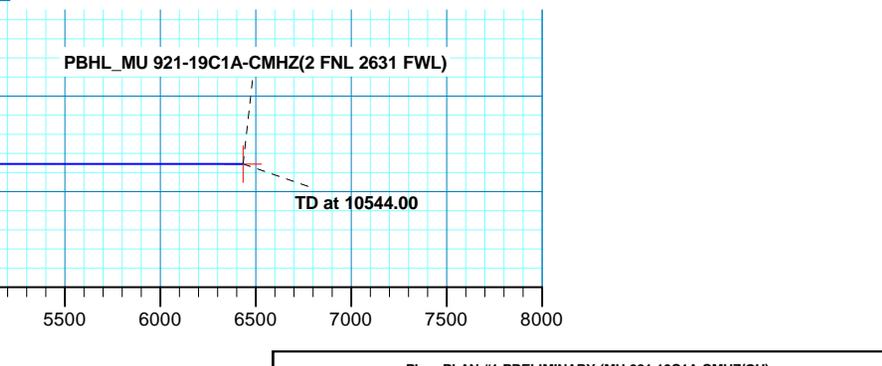
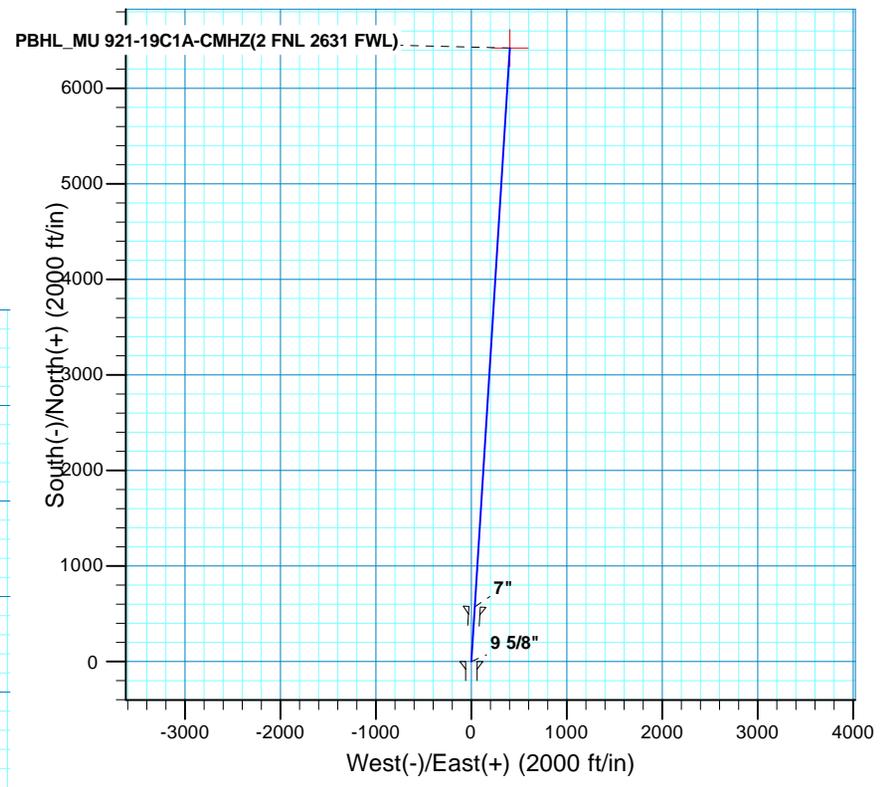
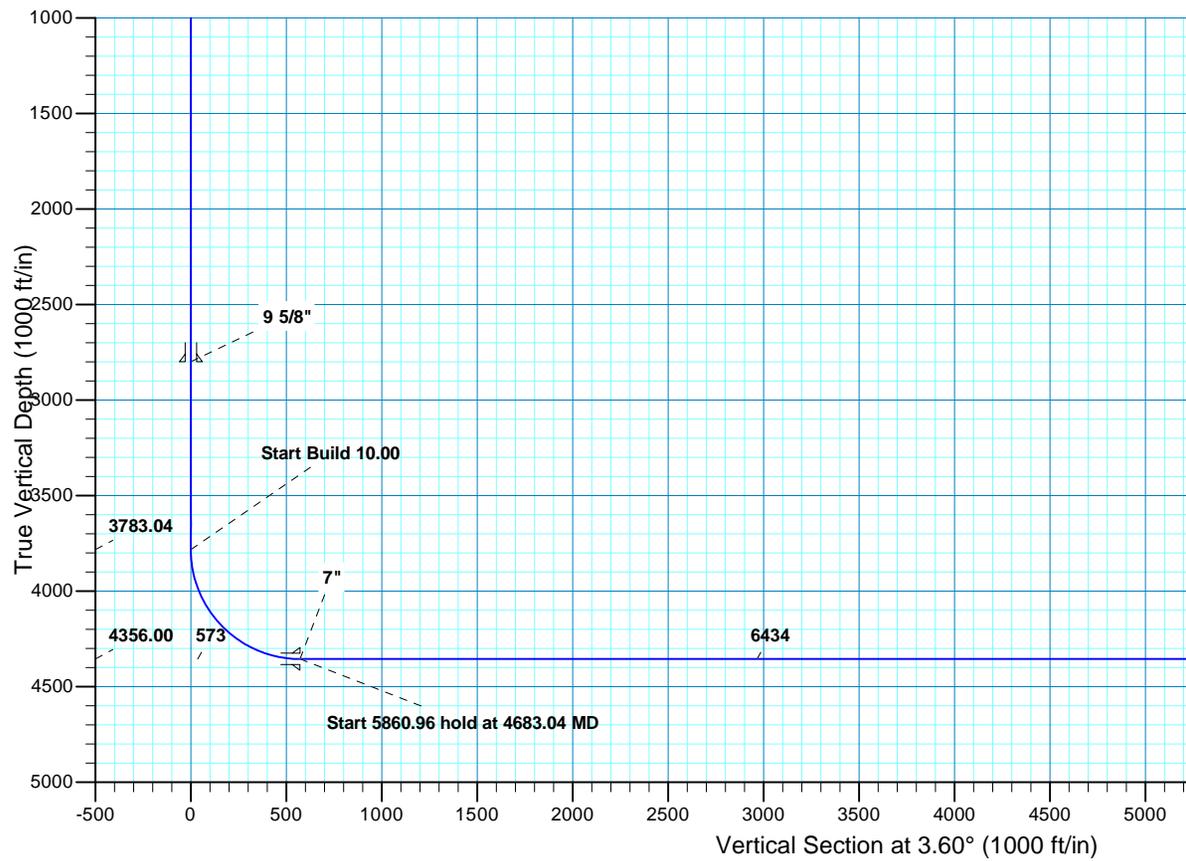
Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: Zone 12N (114 W to 108 W)
 Location: SECTION 30 T9S R21E
 System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name	Size
2799.00	2799.00	9 5/8"	9.625
4356.00	4683.04	7"	7.000

FORMATION TOP DETAILS		
TVDPATH	MDPATH	FORMATION
1592.00	1592.00	GREEN RIVER
1854.00	1854.00	BIRDSNEST
2349.00	2349.00	MAHOGANY MARKER
4346.00	4575.84	GREEN RIVER LOWER

WELL DETAILS: MU 921-19C1A-CMHZ									
GL 4858 & KB 19 @ 4877.00ft (ASSUMED)									
		+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
		0.00	0.00	14533223.24	2033305.69	40.0112200	-109.5969120		
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3783.04	0.00	0.00	3783.04	0.00	0.00	0.00	0.00	0.00	
4683.04	90.00	3.60	4356.00	571.83	35.98	10.00	3.60	572.96	
10544.00	90.00	3.60	4356.00	6421.22	404.01	0.00	0.00	6433.92	PBHL
FORMATION TOP DETAILS					CASING DETAILS				
TVDPath	MDPath	Formation			TVD	MD	Name	Size	
1592.00	1592.00	GREEN RIVER			2799.00	2799.00	9 5/8"	9.625	
1854.00	1854.00	BIRDSNEST			4356.00	4683.04	7"	7.000	
2349.00	2349.00	MAHOGANY MARKER							
4346.00	4575.84	GREEN RIVER LOWER							





Scientific Drilling

US ROCKIES REGION PLANNING

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

MU 921-30C PAD

MU 921-19C1A-CMHZ

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

31 December, 2012





Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well MU 921-19C1A-CMHZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Site:	MU 921-30C PAD	North Reference:	True
Well:	MU 921-19C1A-CMHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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

Site	MU 921-30C PAD, SECTION 30 T9S R21E				
Site Position:		Northing:	14,533,223.24 usft	Latitude:	40.0112200
From:	Lat/Long	Easting:	2,033,305.68 usft	Longitude:	-109.5969120
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.90 °

Well	MU 921-19C1A-CMHZ, 1105 FNL 2127 FWL					
Well Position	+N/-S	0.00 ft	Northing:	14,533,223.24 usft	Latitude:	40.0112200
	+E/-W	0.00 ft	Easting:	2,033,305.68 usft	Longitude:	-109.5969120
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,858.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/12/31	10.92	65.82	52,169

Design	PLAN #1 PRELIMINARY			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	3.60

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	
3,783.04	0.00	0.00	3,783.04	0.00	0.00	0.00	0.00	0.00	0.00	
4,683.04	90.00	3.60	4,356.00	571.83	35.98	10.00	10.00	0.00	3.60	
10,544.00	90.00	3.60	4,356.00	6,421.22	404.01	0.00	0.00	0.00	0.00	PBHL_MU 921-19C1,



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well MU 921-19C1A-CMHZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Site:	MU 921-30C PAD	North Reference:	True
Well:	MU 921-19C1A-CMHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,592.00	0.00	0.00	1,592.00	0.00	0.00	0.00	0.00	0.00	0.00	
GREEN RIVER										
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,854.00	0.00	0.00	1,854.00	0.00	0.00	0.00	0.00	0.00	0.00	
BIRDSNEST										
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,349.00	0.00	0.00	2,349.00	0.00	0.00	0.00	0.00	0.00	0.00	
MAHOGANY MARKER										
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,799.00	0.00	0.00	2,799.00	0.00	0.00	0.00	0.00	0.00	0.00	
9 5/8"										
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,783.04	0.00	0.00	3,783.04	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 10.00										
3,800.00	1.70	3.60	3,800.00	0.25	0.02	0.25	10.00	10.00	0.00	
3,900.00	11.70	3.60	3,899.19	11.87	0.75	11.90	10.00	10.00	0.00	
4,000.00	21.70	3.60	3,994.85	40.51	2.55	40.59	10.00	10.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well MU 921-19C1A-CMHZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Site:	MU 921-30C PAD	North Reference:	True
Well:	MU 921-19C1A-CMHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,100.00	31.70	3.60	4,084.08	85.29	5.37	85.46	10.00	10.00	0.00	
4,200.00	41.70	3.60	4,164.16	144.85	9.11	145.14	10.00	10.00	0.00	
4,300.00	51.70	3.60	4,232.66	217.39	13.68	217.82	10.00	10.00	0.00	
4,400.00	61.70	3.60	4,287.50	300.69	18.92	301.29	10.00	10.00	0.00	
4,500.00	71.70	3.60	4,327.01	392.24	24.68	393.01	10.00	10.00	0.00	
4,575.84	79.28	3.60	4,346.00	465.46	29.29	466.38	10.00	10.00	0.00	
GREEN RIVER LOWER										
4,600.00	81.70	3.60	4,349.99	489.24	30.78	490.21	10.00	10.00	0.00	
4,683.04	90.00	3.60	4,356.00	571.82	35.98	572.96	10.00	10.00	0.00	
Start 5860.96 hold at 4683.04 MD - 7"										
4,700.00	90.00	3.60	4,356.00	588.75	37.04	589.92	0.00	0.00	0.00	
4,800.00	90.00	3.60	4,356.00	688.55	43.32	689.92	0.00	0.00	0.00	
4,900.00	90.00	3.60	4,356.00	788.36	49.60	789.92	0.00	0.00	0.00	
5,000.00	90.00	3.60	4,356.00	888.16	55.88	889.92	0.00	0.00	0.00	
5,100.00	90.00	3.60	4,356.00	987.96	62.16	989.92	0.00	0.00	0.00	
5,200.00	90.00	3.60	4,356.00	1,087.76	68.44	1,089.92	0.00	0.00	0.00	
5,300.00	90.00	3.60	4,356.00	1,187.57	74.72	1,189.92	0.00	0.00	0.00	
5,400.00	90.00	3.60	4,356.00	1,287.37	81.00	1,289.92	0.00	0.00	0.00	
5,500.00	90.00	3.60	4,356.00	1,387.17	87.28	1,389.92	0.00	0.00	0.00	
5,600.00	90.00	3.60	4,356.00	1,486.98	93.56	1,489.92	0.00	0.00	0.00	
5,700.00	90.00	3.60	4,356.00	1,586.78	99.84	1,589.92	0.00	0.00	0.00	
5,800.00	90.00	3.60	4,356.00	1,686.58	106.12	1,689.92	0.00	0.00	0.00	
5,900.00	90.00	3.60	4,356.00	1,786.38	112.40	1,789.92	0.00	0.00	0.00	
6,000.00	90.00	3.60	4,356.00	1,886.19	118.68	1,889.92	0.00	0.00	0.00	
6,100.00	90.00	3.60	4,356.00	1,985.99	124.96	1,989.92	0.00	0.00	0.00	
6,200.00	90.00	3.60	4,356.00	2,085.79	131.23	2,089.92	0.00	0.00	0.00	
6,300.00	90.00	3.60	4,356.00	2,185.59	137.51	2,189.92	0.00	0.00	0.00	
6,400.00	90.00	3.60	4,356.00	2,285.40	143.79	2,289.92	0.00	0.00	0.00	
6,500.00	90.00	3.60	4,356.00	2,385.20	150.07	2,389.92	0.00	0.00	0.00	
6,600.00	90.00	3.60	4,356.00	2,485.00	156.35	2,489.92	0.00	0.00	0.00	
6,700.00	90.00	3.60	4,356.00	2,584.80	162.63	2,589.92	0.00	0.00	0.00	
6,800.00	90.00	3.60	4,356.00	2,684.61	168.91	2,689.92	0.00	0.00	0.00	
6,900.00	90.00	3.60	4,356.00	2,784.41	175.19	2,789.92	0.00	0.00	0.00	
7,000.00	90.00	3.60	4,356.00	2,884.21	181.47	2,889.92	0.00	0.00	0.00	
7,100.00	90.00	3.60	4,356.00	2,984.02	187.75	2,989.92	0.00	0.00	0.00	
7,200.00	90.00	3.60	4,356.00	3,083.82	194.03	3,089.92	0.00	0.00	0.00	
7,300.00	90.00	3.60	4,356.00	3,183.62	200.31	3,189.92	0.00	0.00	0.00	
7,400.00	90.00	3.60	4,356.00	3,283.42	206.59	3,289.92	0.00	0.00	0.00	
7,500.00	90.00	3.60	4,356.00	3,383.23	212.87	3,389.92	0.00	0.00	0.00	
7,600.00	90.00	3.60	4,356.00	3,483.03	219.15	3,489.92	0.00	0.00	0.00	
7,700.00	90.00	3.60	4,356.00	3,582.83	225.43	3,589.92	0.00	0.00	0.00	
7,800.00	90.00	3.60	4,356.00	3,682.63	231.71	3,689.92	0.00	0.00	0.00	
7,900.00	90.00	3.60	4,356.00	3,782.44	237.99	3,789.92	0.00	0.00	0.00	
8,000.00	90.00	3.60	4,356.00	3,882.24	244.26	3,889.92	0.00	0.00	0.00	
8,100.00	90.00	3.60	4,356.00	3,982.04	250.54	3,989.92	0.00	0.00	0.00	
8,200.00	90.00	3.60	4,356.00	4,081.84	256.82	4,089.92	0.00	0.00	0.00	
8,300.00	90.00	3.60	4,356.00	4,181.65	263.10	4,189.92	0.00	0.00	0.00	
8,400.00	90.00	3.60	4,356.00	4,281.45	269.38	4,289.92	0.00	0.00	0.00	
8,500.00	90.00	3.60	4,356.00	4,381.25	275.66	4,389.92	0.00	0.00	0.00	
8,600.00	90.00	3.60	4,356.00	4,481.05	281.94	4,489.92	0.00	0.00	0.00	
8,700.00	90.00	3.60	4,356.00	4,580.86	288.22	4,589.92	0.00	0.00	0.00	
8,800.00	90.00	3.60	4,356.00	4,680.66	294.50	4,689.92	0.00	0.00	0.00	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well MU 921-19C1A-CMHZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Site:	MU 921-30C PAD	North Reference:	True
Well:	MU 921-19C1A-CMHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,900.00	90.00	3.60	4,356.00	4,780.46	300.78	4,789.92	0.00	0.00	0.00	
9,000.00	90.00	3.60	4,356.00	4,880.27	307.06	4,889.92	0.00	0.00	0.00	
9,100.00	90.00	3.60	4,356.00	4,980.07	313.34	4,989.92	0.00	0.00	0.00	
9,200.00	90.00	3.60	4,356.00	5,079.87	319.62	5,089.92	0.00	0.00	0.00	
9,300.00	90.00	3.60	4,356.00	5,179.67	325.90	5,189.92	0.00	0.00	0.00	
9,400.00	90.00	3.60	4,356.00	5,279.48	332.18	5,289.92	0.00	0.00	0.00	
9,500.00	90.00	3.60	4,356.00	5,379.28	338.46	5,389.92	0.00	0.00	0.00	
9,600.00	90.00	3.60	4,356.00	5,479.08	344.74	5,489.92	0.00	0.00	0.00	
9,700.00	90.00	3.60	4,356.00	5,578.88	351.02	5,589.92	0.00	0.00	0.00	
9,800.00	90.00	3.60	4,356.00	5,678.69	357.29	5,689.92	0.00	0.00	0.00	
9,900.00	90.00	3.60	4,356.00	5,778.49	363.57	5,789.92	0.00	0.00	0.00	
10,000.00	90.00	3.60	4,356.00	5,878.29	369.85	5,889.92	0.00	0.00	0.00	
10,100.00	90.00	3.60	4,356.00	5,978.09	376.13	5,989.92	0.00	0.00	0.00	
10,200.00	90.00	3.60	4,356.00	6,077.90	382.41	6,089.92	0.00	0.00	0.00	
10,300.00	90.00	3.60	4,356.00	6,177.70	388.69	6,189.92	0.00	0.00	0.00	
10,400.00	90.00	3.60	4,356.00	6,277.50	394.97	6,289.92	0.00	0.00	0.00	
10,500.00	90.00	3.60	4,356.00	6,377.31	401.25	6,389.92	0.00	0.00	0.00	
10,544.00	90.00	3.60	4,356.00	6,421.22	404.01	6,433.92	0.00	0.00	0.00	
TD at 10544.00 - PBHL_MU 921-19C1A-CMHZ(2 FNL 2631 FWL)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_MU 921-19C1A-C - hit/miss target - Shape - Point	0.00	0.00	4,356.00	6,421.22	404.01	14,539,650.01	2,033,608.53	40.0288510	-109.5954690	

Casing Points							
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)			
2,799.00	2,799.00	9 5/8"	9.625	12.250			
4,683.04	4,356.00	7"	7.000	7.500			

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,592.00	1,592.00	GREEN RIVER				
1,854.00	1,854.00	BIRDSNEST				
2,349.00	2,349.00	MAHOGANY MARKER				
4,575.84	4,346.00	GREEN RIVER LOWER				



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well MU 921-19C1A-CMHZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 4858 & KB 19 @ 4877.00ft (ASSUMED)
Site:	MU 921-30C PAD	North Reference:	True
Well:	MU 921-19C1A-CMHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
3,783.04	3,783.04	0.00	0.00	Start Build 10.00
4,683.04	4,356.00	571.83	35.98	Start 5860.96 hold at 4683.04 MD
10,544.00	4,356.00	6,421.22	404.01	TD at 10544.00

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

MU 921-30C PAD

<u>API #</u>	<u>MU 921-19C1A-CMHZ</u>		
	Surface: 1105 FNL / 2127 FWL	NENW	Section 30
	BHL: 2 FNL / 2631 FWL	NENW	Section 19
<u>API #</u>	<u>MU 921-19C1A-UBHZ</u>		
	Surface: 1093 FNL / 2105 FWL	NENW	Section 30
	BHL: 2 FNL / 2631 FWL	NENW	Section 19
<u>API #</u>	<u>MU 921-19C2A-CMHZ</u>		
	Surface: 1080 FNL / 2084 FWL	NENW	Section 30
	BHL: 7 FNL / 1973 FWL	NENW	Section 19
<u>API #</u>	<u>MU 921-19C2A-UBHZ</u>		
	Surface: 1068 FNL / 2062 FWL	NENW	Section 30
	BHL: 7 FNL / 1973 FWL	NENW	Section 19
<u>API #</u>	<u>MU 921-30N3D-CMHZ</u>		
	Surface: 1167 FNL / 2236 FWL	NENW	Section 30
	BHL: 16 FSL / 1965 FWL	SESW	Section 30
<u>API #</u>	<u>MU 921-30N3D-UBHZ</u>		
	Surface: 1155 FNL / 2214 FWL	NENW	Section 30
	BHL: 16 FSL / 1965 FWL	SESW	Section 30
<u>API #</u>	<u>MU 921-30N4D-CMHZ</u>		
	Surface: 1192 FNL / 2279 FWL	NENW	Section 30
	BHL: 12 FSL / 2642 FWL	SESW	Section 30
<u>API #</u>	<u>MU 921-30N4D-UBHZ</u>		
	Surface: 1180 FNL / 2257 FWL	NENW	Section 30
	BHL: 12 FSL / 2642 FWL	SESW	Section 30

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

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.

An on-site meeting was held on October 23, 2012. Present were:

- Dave Gordon, Tyler Cox, Melissa Wardle - BLM;
- Mitch Batty - Timberline Engineering & Land Surveying, Inc.; and
- Randy Townley, Casey McKee, Cara Mahler, Danielle Piernot, Justin Brady, Rod Anderson and Charles Chase, - Kerr-McGee
- Scott Carson - Smiling Lake
- John Mills - J.C. Construction

A. Existing Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Topo B for existing roads.

B. New or Reconstructed Access Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

There are no new access roads associated with this pad.

C. Location of Existing Wells:

Please refer to Topo C for exiting wells.

D. Location of Existing and/or Proposed Facilities:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

This pad will expand the existing pad for the NBU 921-30C, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on January 10, 2013. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

GAS GATHERING

Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The total new gas gathering pipeline distance from the meter to the tie in point is $\pm 3,655'$ and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- $\pm 3,655'$ (0.69 miles) – Section 30 T9S R21E (NE/4 NW/4) – On-lease UTU0581, Tribal surface, New 6" and 10" buried gas gathering pipeline from the meter to the MU 921-30H intersection. Please refer to Topo D2 - Pad and Pipeline Detail.
- $\pm 795'$ (0.15 miles) – Section 30 T9S R21E (NE/4 NW/4) – On-lease UTU0581, Tribal surface, 4" surface gas gathering pipeline re-route around the northeastern edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

LIQUID GATHERING

Please refer to Exhibit B and Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 3,655'$ and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

$\pm 3,655'$ (0.69 miles) – Section 30 T9S R21E (NE/4 NW/4) – On-lease UTU0581, Tribal surface, New 6" buried liquid gathering pipeline from the separator to the MU 921-36H intersection. Please refer to Topo D2 - Pad and Pipeline Detail.

Pipeline Gathering Construction

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

The Anadarko Completions Transportation System (ACTS) information:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Exhibit C for ACTS Lines

E. Location and Types of Water Supply:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

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

F. Construction Materials:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

G. Methods for Handling Waste:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Materials Management

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

J. Plans for Surface Reclamation:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Interim Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Measures Common to Interim and Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Weed Control

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Monitoring

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

K. Surface/Mineral Ownership:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

L. Other Information:**Cultural and Paleontological Resources**

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Resource Reports:

A Class I literature survey was completed on November 7, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 12-283.

A paleontological reconnaissance survey was completed on October 5, 2012 by SWCA Environmental Consultants. For additional details please refer to report UT12-14314-186.

Biological field survey was completed on October 16, 2012 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-851.

Proposed Action Annual Emissions Tables:

Please refer to the Appendix in the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

MU 921-19C1A-CMHZ/ 921-19C1A-UBHZ/ 921-19C2A-CMHZ/ 921-19C2A-UBHZ
MU 921-30N3D-CMHZ/921-30N3D-UBHZ/ 921-30N4D-CMHZ/ 921-30N4D-UBHZ
Kerr-McGee Oil Gas Onshore, L.P.

Surface Use Plan of Operations
5 of 5

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

Danielle Piernot
Regulatory Analyst II
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 pursuant to 43 CFR 3104 for lease activities is being provided 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

January 13, 2013

Date

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)

March 18, 2013

Memorandum

To: Assistant Field Office Manager Minerals
Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2013 Plan of Development Maverick 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 2013 within the Maverick Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
MU 921-30C PAD		
43-047-53685	MU 921-19C2A-CMHZ	Sec 30 T09S R21E 1080 FNL 2084 FWL
	Lateral 1	Sec 19 T09S R21E 0007 FNL 1973 FWL
43-047-53699	MU 921-19C2A-UBHZ	Sec 30 T09S R21E 1068 FNL 2062 FWL
	Lateral 1	Sec 19 T09S R21E 0007 FNL 1973 FWL
43-047-53700	MU 921-30N3D-CMHZ	Sec 30 T09S R21E 1167 FNL 2236 FWL
	Lateral 1	Sec 30 T09S R21E 0016 FSL 1965 FWL
43-047-53686	MU 921-30N3D-UBHZ	Sec 30 T09S R21E 1155 FNL 2214 FWL
	Lateral 1	Sec 30 T09S R21E 0016 FSL 1965 FWL
43-047-53698	MU 921-30N4D-CMHZ	Sec 30 T09S R21E 1192 FNL 2279 FWL
	Lateral 1	Sec 30 T09S R21E 0012 FSL 2642 FWL
43-047-53687	MU 921-30N4D-UBHZ	Sec 30 T09S R21E 1180 FNL 2257 FWL
	Lateral 1	Sec 30 T09S R21E 0012 FSL 2642 FWL
43-047-53688	MU 921-19C1A-CMHZ	Sec 30 T09S R21E 1105 FNL 2127 FWL
	Lateral 1	Sec 19 T09S R21E 0002 FNL 2631 FWL
43-047-53697	MU 921-19C1A-UBHZ	Sec 30 T09S R21E 1093 FNL 2105 FWL
	Lateral 1	Sec 19 T09S R21E 0002 FNL 2631 FWL

RECEIVED: March 19, 2013

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
MU 921-30B PAD		
43-047-53689	MU 921-19B1B-UBHZ	Sec 30 T09S R21E 0413 FNL 1730 FEL
	Lateral 1	Sec 19 T09S R21E 0002 FNL 1756 FEL
43-047-53690	MU 921-19B2A-CMHZ	Sec 30 T09S R21E 0431 FNL 1748 FEL
	Lateral 1	Sec 19 T09S R21E 0002 FNL 2414 FEL
43-047-53691	MU 921-19B2A-UBHZ	Sec 30 T09S R21E 0449 FNL 1765 FEL
	Lateral 1	Sec 19 T09S R21E 0002 FNL 2414 FEL
43-047-53692	MU 921-30O3D-CMHZ	Sec 30 T09S R21E 0556 FNL 1871 FEL
	Lateral 1	Sec 30 T09S R21E 0009 FSL 2372 FEL
43-047-53693	MU 921-30O3D-UBHZ	Sec 30 T09S R21E 0573 FNL 1888 FEL
	Lateral 1	Sec 30 T09S R21E 0009 FSL 2372 FEL
43-047-53694	MU 921-30O4D-CMHZ	Sec 30 T09S R21E 0520 FNL 1836 FEL
	Lateral 1	Sec 30 T09S R21E 0006 FSL 1714 FEL
43-047-53695	MU 921-30O4D-UBHZ	Sec 30 T09S R21E 0538 FNL 1853 FEL
	Lateral 1	Sec 30 T09S R21E 0006 FSL 1714 FEL

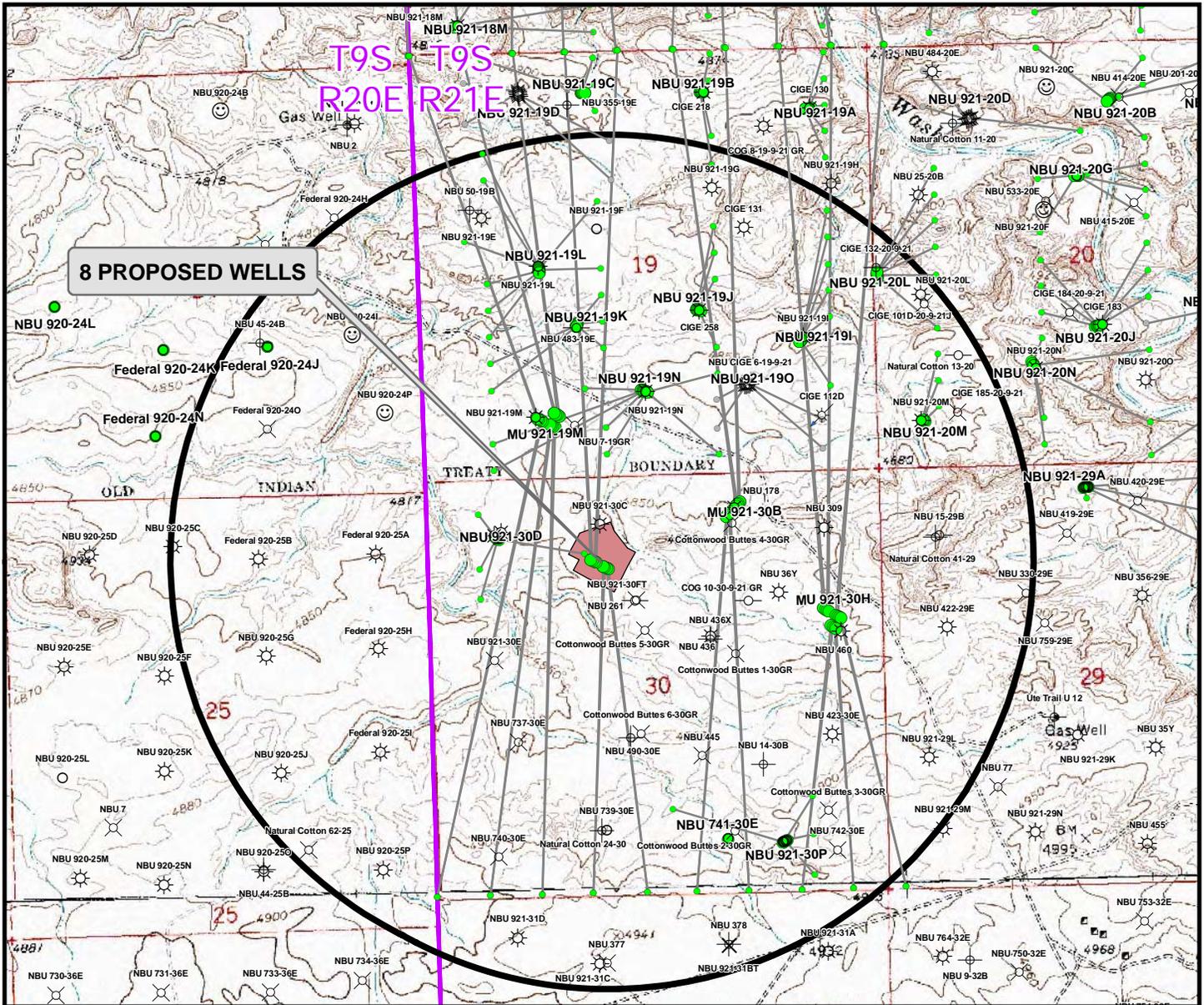
This office has no objection to permitting the wells at this time.

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: 2013.03.18 10:41:20 -0600

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

MCoulthard:mc:3-18-13



8 PROPOSED WELLS

Well locations derived from Utah Division of Oil, Gas and Mining (UDOGM) (oilgas.ogm.utah.gov).
 The estimated distances from proposed bore locations to the nearest existing bore locations are based on UDOGM data.

Proposed Well	Nearest Well Bore	Footage	Proposed Well	Nearest Well Bore	Footage
MU 921-30N4D-CMHZ	Natural Cotton 24-30	964ft	MU 921-19C1A-CMHZ	NBU 355-19E	925ft
MU 921-30N4D-UBHZ	Natural Cotton 24-30	964ft	MU 921-19C1A-UBHZ	NBU 355-19E	925ft
MU 921-30N3D-CMHZ	Natural Cotton 24-30	793ft	MU 921-19C2A-CMHZ	NBU 355-19E	652ft
MU 921-30N3D-UBHZ	Natural Cotton 24-30	793ft	MU 921-19C2A-UBHZ	NBU 355-19E	652ft

Legend

- Well - Proposed
- Well Path
- ☀ Producing
- ⊕ Deferred
- ☀ Active Injector
- ⊕ Plugged & Abandoned
- Bottom Hole - Proposed
- Well Pad
- ☺ Spudded
- ⊗ Cancelled
- ⊗ Location Abandoned
- Bottom Hole - Existing
- ◻ Well - 1 Mile Radius
- APD Approved
- ⊖ Temporarily Abandoned
- Shut-In
- ⊗ Preliminary Location

WELL PAD - MU 921-30C

TOPO C
 MU 921-30N4D-CMHZ, MU 921-30N4D-UBHZ,
 MU 921-30N3D-CMHZ, MU 921-30N3D-UBHZ,
 MU 921-19C1A-CMHZ, MU 921-19C1A-UBHZ,
 MU 921-19C2A-CMHZ & MU 921-19C2A-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street
 Denver, Colorado 80202



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

SCALE: 1" = 2,000ft	NAD83 USP Central	16
DRAWN: TL	DATE: 28 Sep 2012	
REVISED:	DATE:	

SHEET NO:
16
 16 OF 20



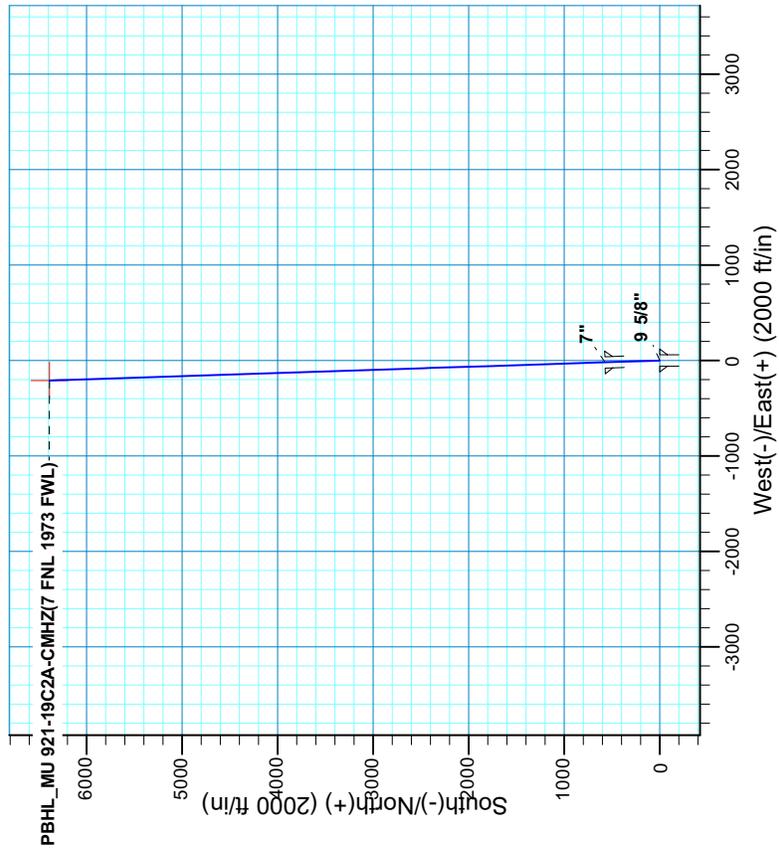
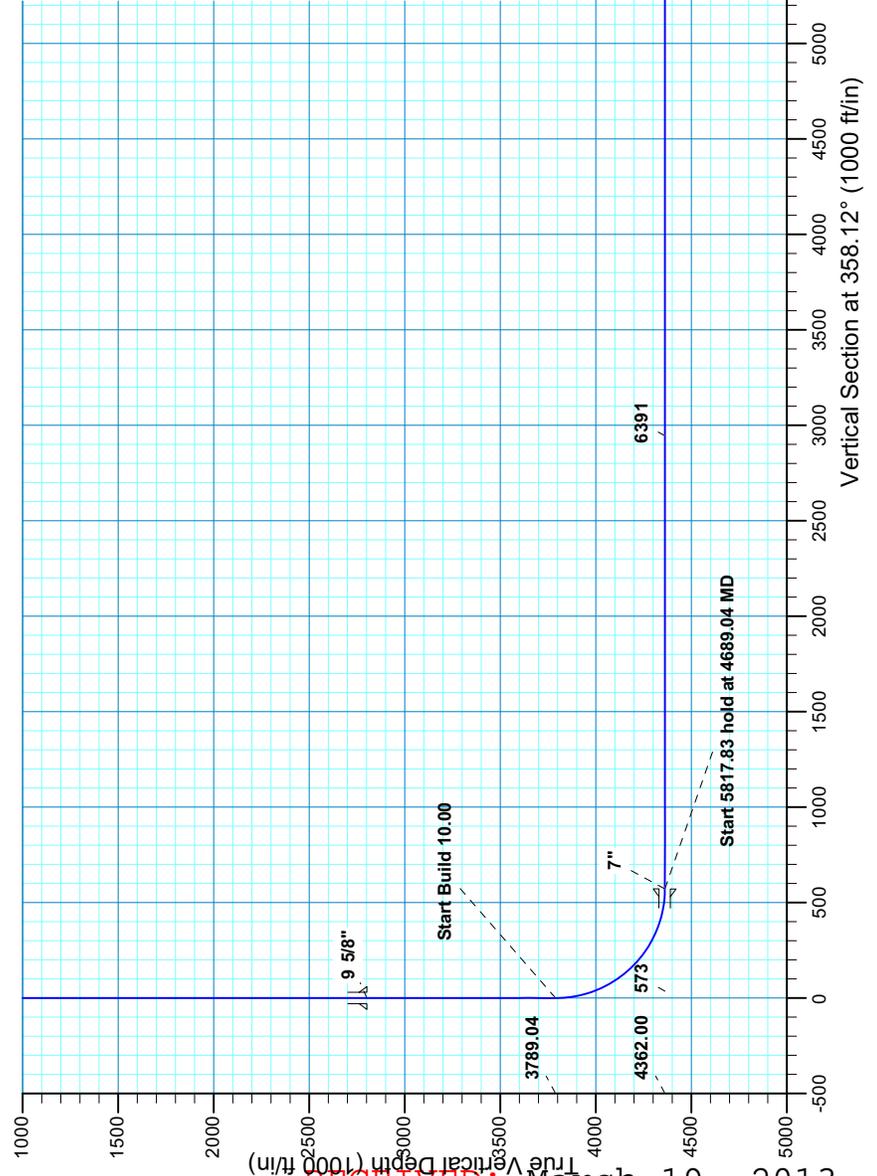
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-19C2A-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: MU 921-19C2A-CMHZ			
GL 4858 & KB 19 @ 4877.00ft (ASSUMED)			
+N-S	+E-W	Northing	Eastng
0.00	0.00	14533246.95	2033261.62
Latitude	Longitude		
40.0112870	-109.5970680		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3789.04	0.00	0.00	3789.04	0.00	0.00	0.00	0.00	0.00	0.00
4689.04	90.00	358.12	4362.00	572.85	-18.80	10.00	358.12	572.96	PBHL
10506.87	90.00	358.12	4362.00	6387.34	-209.73	0.00	0.00	6390.79	PBHL

FORMATION TOP DETAILS				CASING DETAILS			
MDPath	Formation	TVD	MD	Name	Size	TVD	MD
1597.00	GREEN RIVER	2802.00	2802.00	9 5/8"	9.625	4362.00	4689.04
1858.00	BIRDSNEST			7"	7.000		
2352.00	MAHOGANY MARKER						
4352.00	GREEN RIVER LOWER						



Plan: PLAN #1 PRELIMINARY (MU 921-19C2A-CMHZ)OH
 Received: March 04, 2013
 By: [Signature]

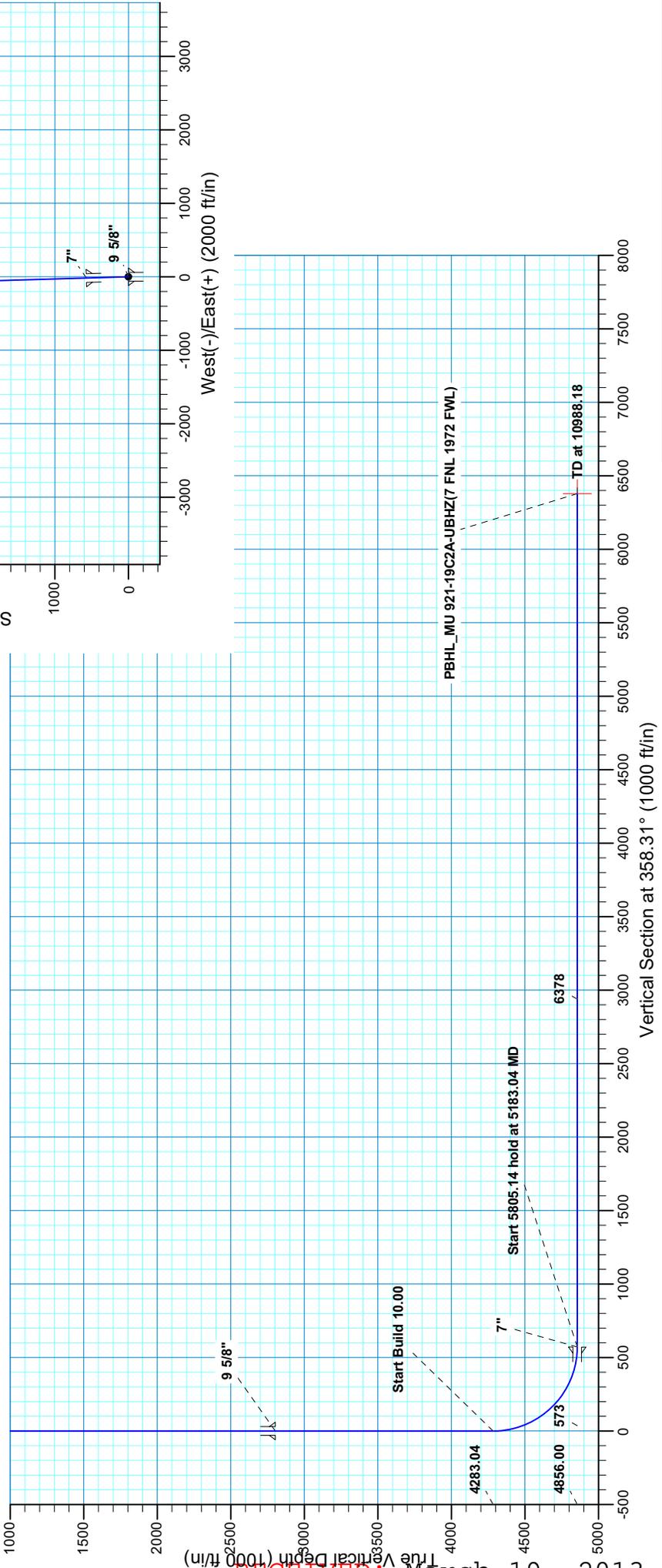


Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-19C2A-UBHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



API Well Number: 43047536880000

WELL DETAILS: MU 921-19C2A-UBHZ									
GL 4858 & KB 19 @ 4877.00R (ASSUMED)									
+N-S	+E-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	14533258.62	2033239.59	40.0113200	-109.5971460				
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4283.04	0.00	0.00	4283.04	0.00	0.00	0.00	0.00	0.00	0.00
5183.04	90.00	358.31	4856.00	572.71	-16.88	10.00	358.31	572.96	0.00
10988.18	90.00	358.31	4856.00	6375.32	-187.89	0.00	0.00	6376.09	PBHL_MU 921-19C2A-UBHZ(7 FNL 1972 FWL)
FORMATION TOP DETAILS									
MDPath	Formation								
1600.00	GREEN RIVER								
1860.00	BIRDSNEST								
2352.00	MAHOGANY MARKER								
4352.00	GREEN RIVER LOWER								
4801.00	UTELAND BUTTE								
CASING DETAILS									
TVD	MD	Name	Size						
2802.00	2802.00	9 5/8"	9.625						
4856.00	5183.04	7"	7.000						



Plan: PLAN #1 PRELIMINARY (MU 921-19C2A-UBHZ/OH)
 Received: March 04, 2013

RECEIVED: March 19, 2013



Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-30N3D-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY

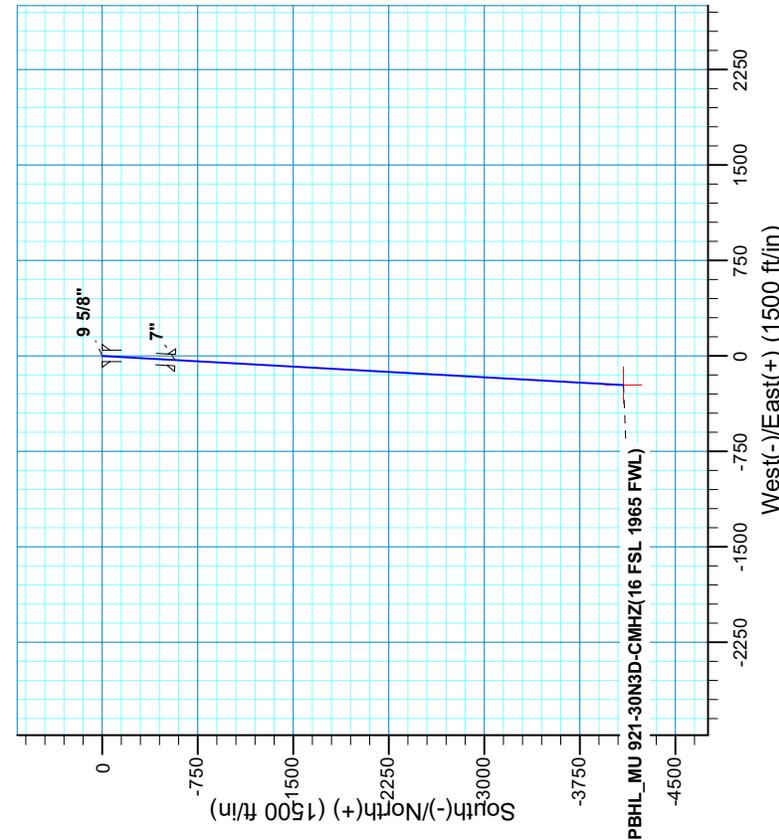
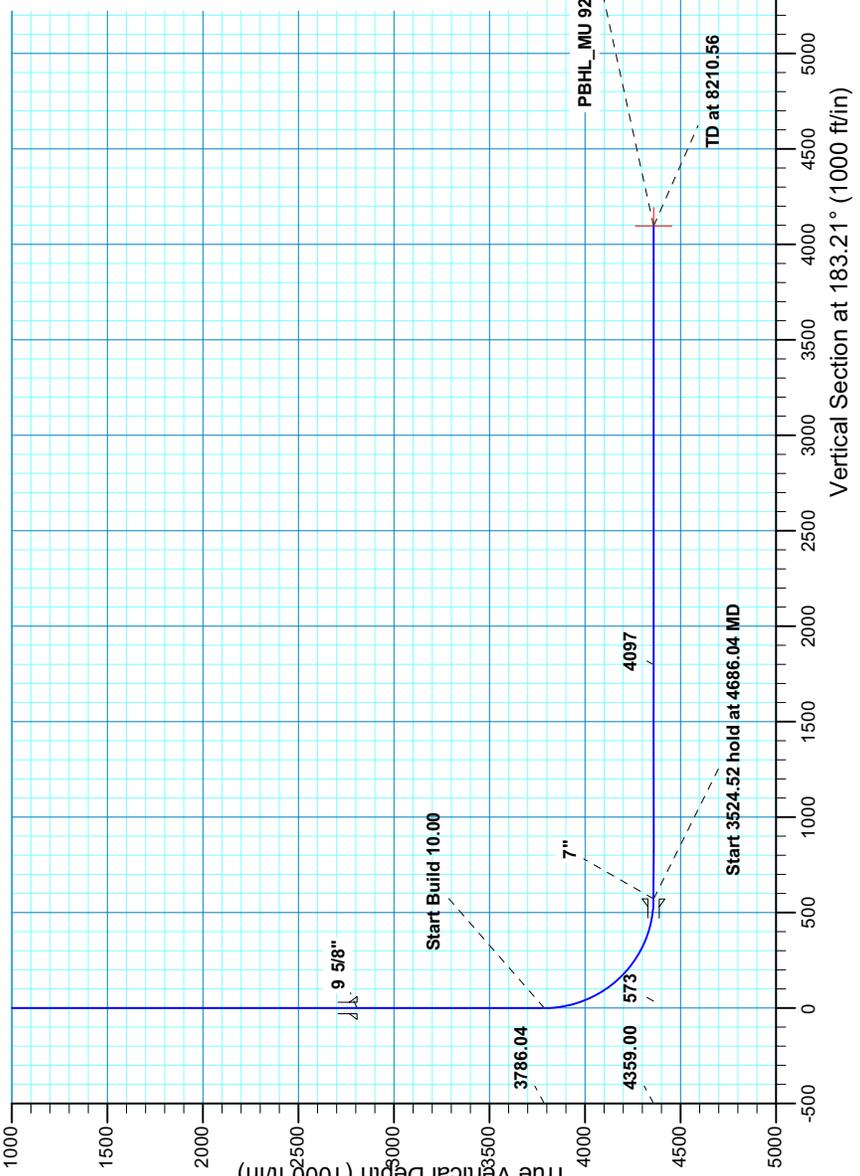


WELL DETAILS: MU 921-30N3D-CMHZ
 GL 4858 & KB 19
 @ 4877.00ft (ASSUMED)

+N/-S	+E/-W	Northing	Eastng	Latitude	Longitude
0.00	0.00	14533163.77	2033415.58	40.0110520	-109.5965230

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3786.04	0.00	0.00	3786.04	0.00	0.00	0.00	0.00	0.00	0.00
4686.04	90.00	183.21	4359.00	-572.06	-32.08	10.00	183.21	572.96	PBHL
8210.56	90.00	183.21	4359.00	-4091.05	-229.42	0.00	0.00	4097.48	PBHL

FORMATION TOP DETAILS				CASING DETAILS	
TVDPath	MDPath	Formation	TVD	MD	Name Size
1594.00	1594.00	GREEN RIVER	2806.00	2806.00	9 5/8" 9.625
1857.00	1857.00	BIRDSNEST	4359.00	4686.04	7" 7.000
2356.00	2356.00	MAHOGANY MARKER			
4349.00	4578.84	GREEN RIVER LOWER			





Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-30N3D-UBHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY

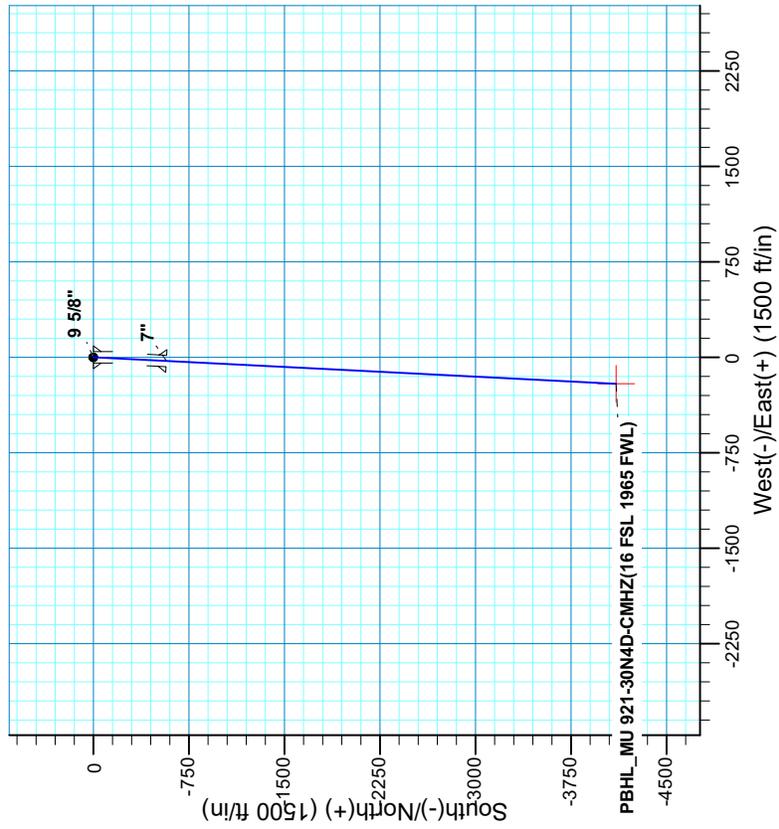
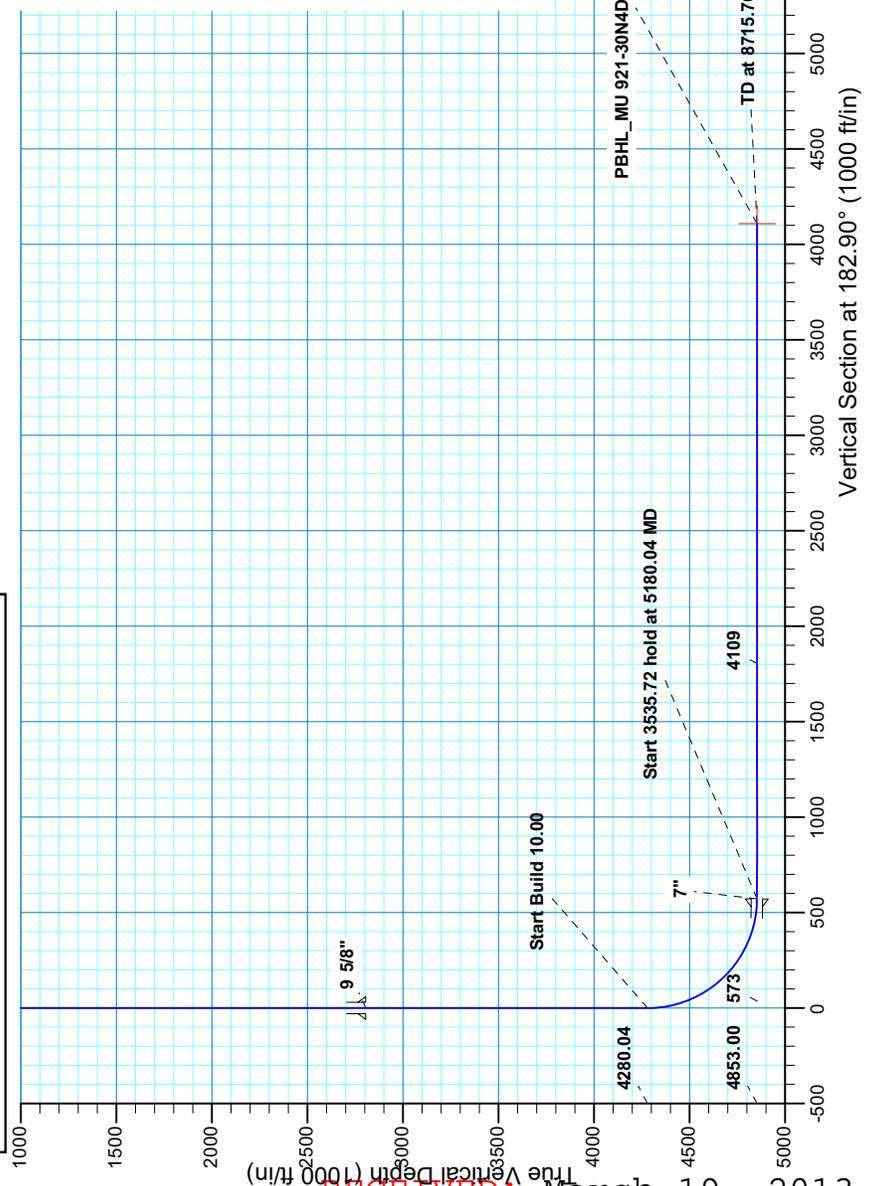


WELL DETAILS: MU 921-30N3D-UBHZ
 GL 4858 & KB 19
 @ 4877.00ft (ASSUMED)

+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14533175.81	2033393.54	40.0110960	-109.5966010

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4280.04	0.00	0.00	4280.04	0.00	0.00	0.00	0.00	0.00	0.00
5180.04	90.00	182.90	4853.00	-572.23	-28.95	10.00	182.90	572.96	PBHL
8715.76	90.00	182.90	4853.00	-4103.43	-207.57	0.00	0.00	4108.88	PBHL

FORMATION TOP DETAILS				CASING DETAILS			
TVDPath	MDPath	Formation	TVD	MD	Name	Size	
1594.00	1594.00	GREEN RIVER	2805.00	2805.00	9 5/8"	9.625	
1857.00	1857.00	BIRDSNEST	4853.00	5180.04	7"	7.000	
2355.00	2355.00	MAHOGANY MARKER					
4349.00	4349.17	GREEN RIVER LOWER					
4798.00	4926.94	UTELAND BUTTE					



Plan: PLAN #1 PRELIMINARY (MU 921-30N3D-UBHZ/OH)
 Received: March 04, 2013
 By: [Signature]



Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-30N4D-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY

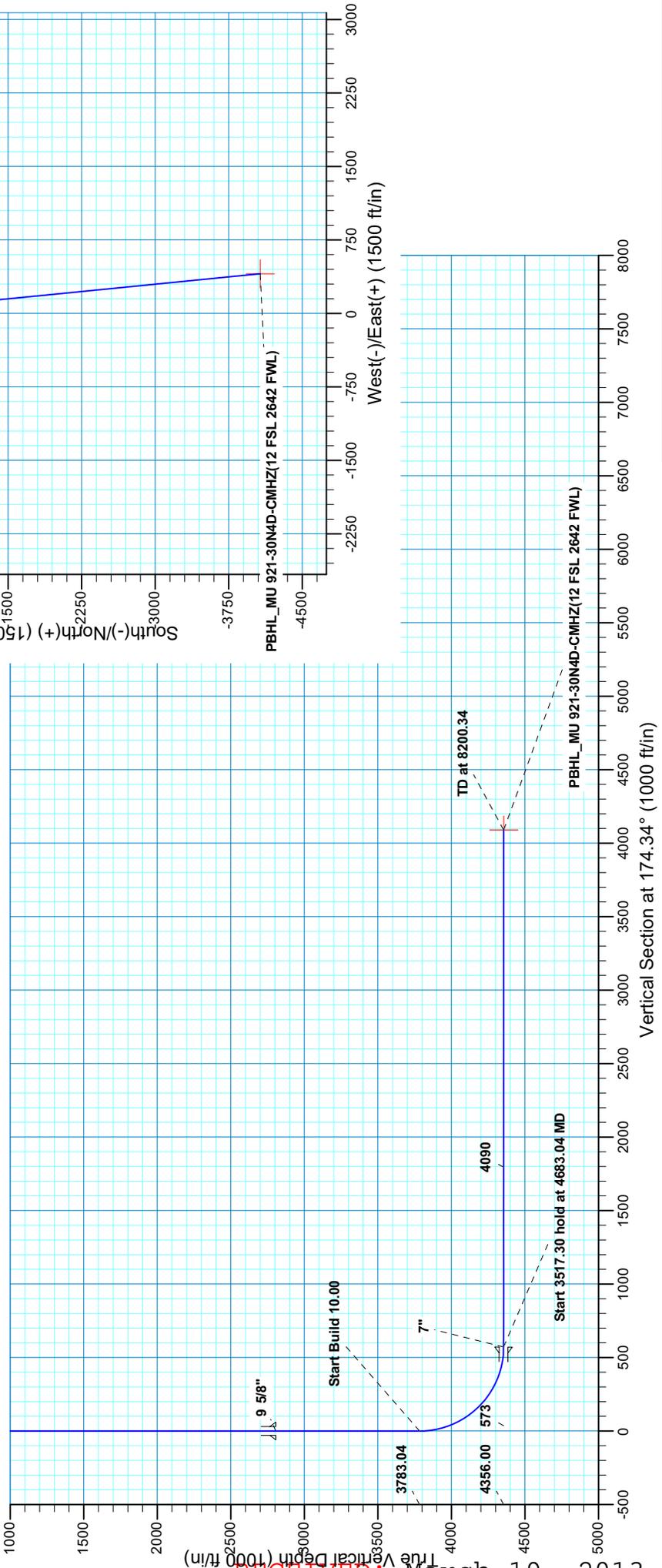


WELL DETAILS: MU 921-30N4D-CMHZ
 GL 4858 & KB 19
 @ 4877.00ft (ASSUMED)

+N/-S	+E/-W	Northing	Eastng	Latitude	Longitude
0.00	0.00	14533140.06	2033459.65	40.0109850	-109.5963670

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3783.04	0.00	0.00	3783.04	0.00	0.00	0.00	0.00	0.00	0.00
4683.04	90.00	174.34	4356.00	-570.16	56.54	10.00	174.34	572.96	PBHL
8200.34	90.00	174.34	4356.00	-4070.29	403.63	0.00	0.00	4090.25	PBHL

FORMATION TOP DETAILS				CASING DETAILS	
TVDPath	MDPath	Formation	TVD	MD	Name Size
1593.00	1593.00	GREEN RIVER	2806.00	2806.00	9 5/8" 9.625
1856.00	1856.00	BIRDSNEST	4356.00	4683.04	7" 7.000
2356.00	2356.00	MAHOGANY MARKER			
4346.00	4575.84	GREEN RIVER LOWER			



Plan: PLAN #1 PRELIMINARY (MU 921-30N4D-CMHZOH)
 Received: March 04, 2013
 By: [Signature]

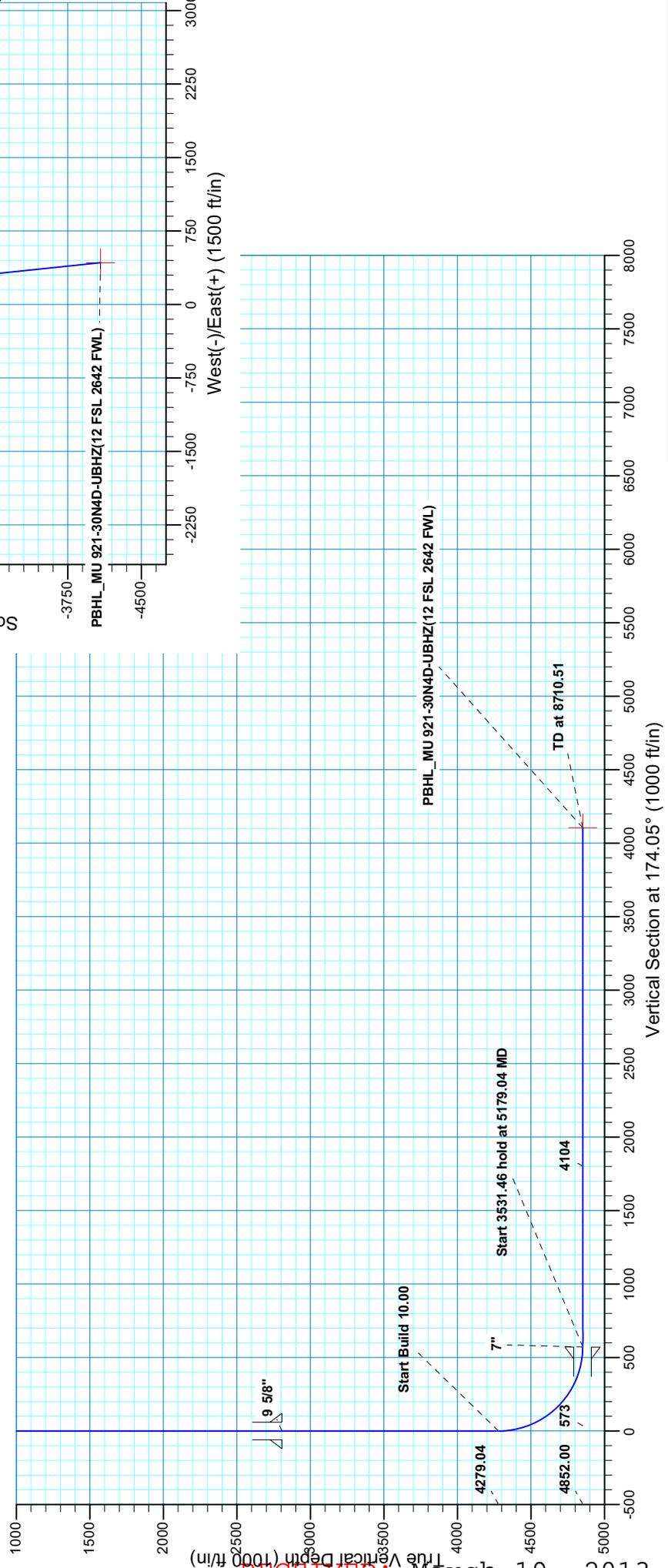


Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-30N4D-UBHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



API Well Number: 43047536880000

WELL DETAILS: MU 921-30N4D-UBHZ									
GL 4858 & KB 19 @ 4877.00ft (ASSUMED)									
+N-S	+E-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	14533151.74	2033437.62	40.0110180	-109.5964450				
SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4279.04	0.00	0.00	4279.04	0.00	0.00	0.00	0.00	0.00	0.00
5179.04	90.00	174.05	4852.00	-569.87	59.39	10.00	174.05	572.96	PBHL
8710.51	90.00	174.05	4852.00	-1082.31	425.47	0.00	0.00	4104.42	PBHL
FORMATION TOP DETAILS									
MDPath	Formation	TVD	MD	Name	Size				
1593.00	GREEN RIVER	2806.00	2806.00	9 5/8"	9.625				
1856.00	BIRDSNEST	4852.00	5179.04	7"	7.000				
2356.00	MAHOGANY MARKER								
4347.00	GREEN RIVER LOWER								
4797.00	UTELAND BUTTE								
CASING DETAILS									
TVDPath	Formation	TVD	MD	Name	Size				
1593.00	GREEN RIVER	2806.00	2806.00	9 5/8"	9.625				
1856.00	BIRDSNEST	4852.00	5179.04	7"	7.000				



Plan: PLAN #1 PRELIMINARY (MU 921-30N4D-UBHZ/OH)
 Received: March 04, 2013
 By: [Signature]

RECEIVED: March 19, 2013



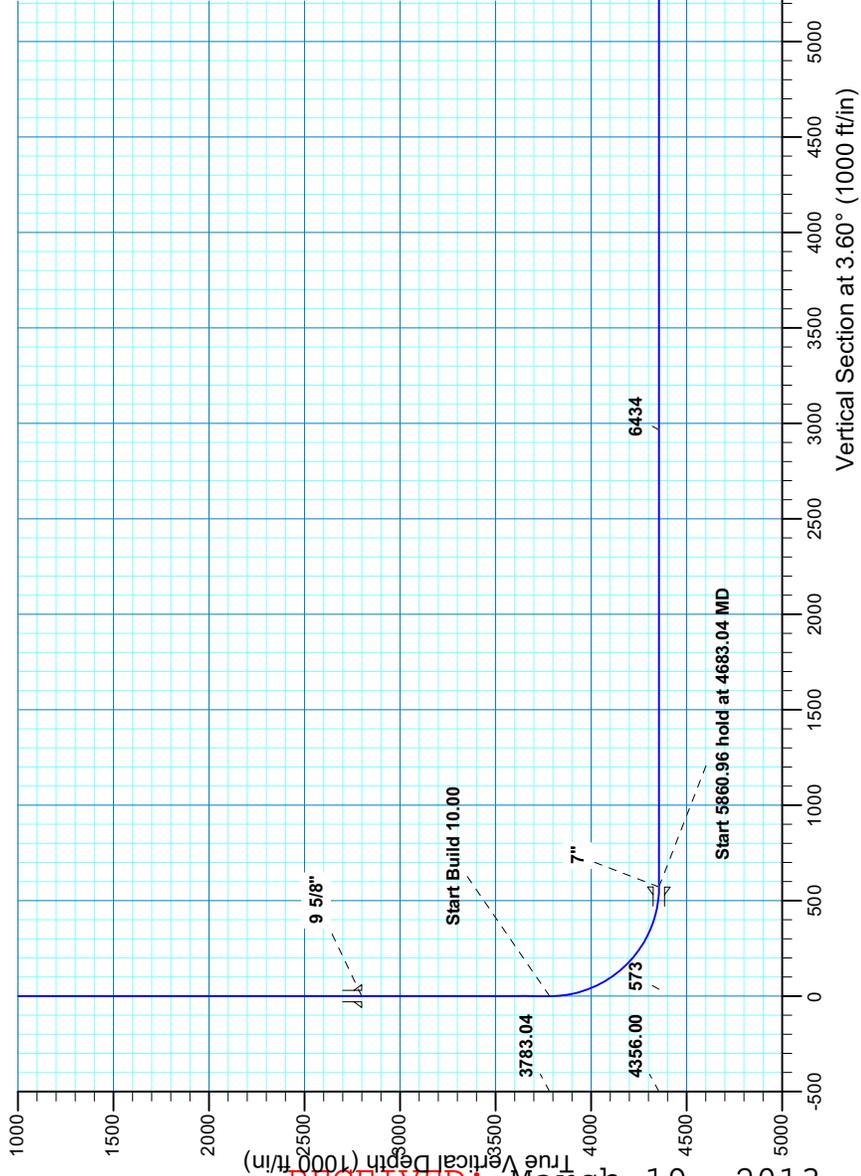
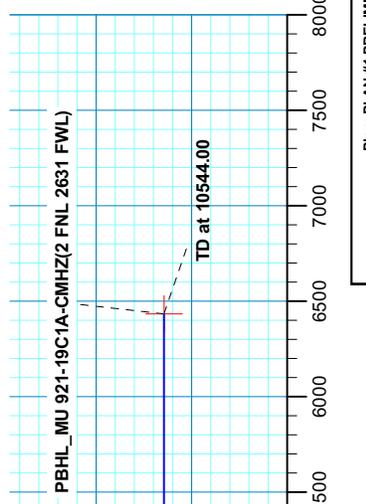
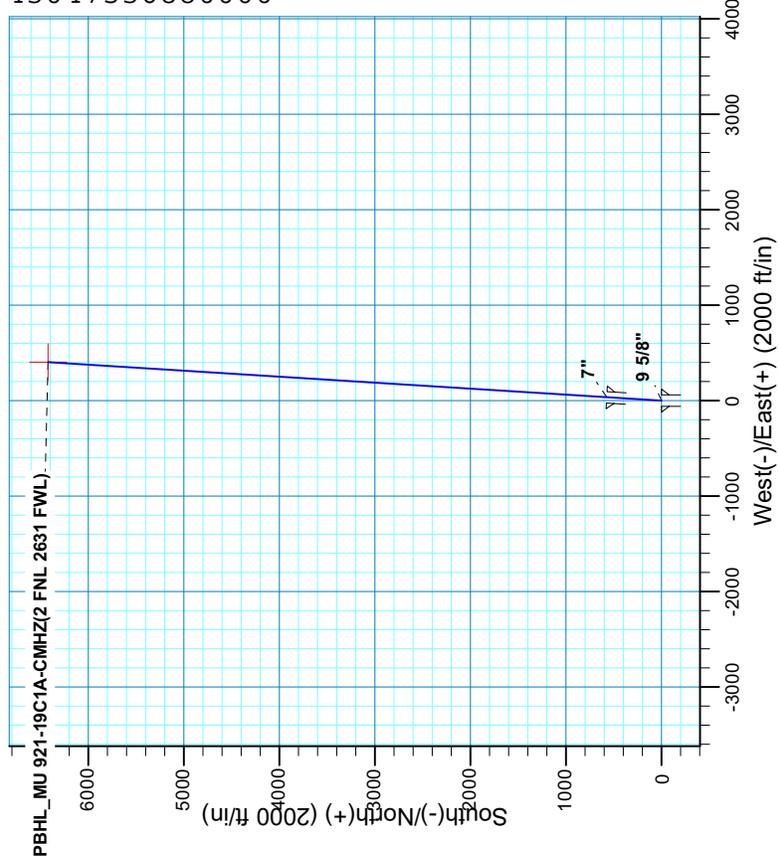
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-19C1A-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: MU 921-19C1A-CMHZ			
GL 4858 & KB 19			
@ 4877.00ft (ASSUMED)			
+N/-S	+E/-W	Northing	Eastng
0.00	0.00	14533223.24	2033305.69
Latitude	Longitude		
40.0112200	-109.5969120		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3783.04	0.00	0.00	3783.04	0.00	0.00	0.00	0.00	0.00	0.00
4683.04	90.00	3.60	4356.00	571.83	35.88	10.00	3.60	572.96	PBHL
10544.00	90.00	3.60	4356.00	6421.22	404.01	0.00	0.00	6433.92	PBHL

FORMATION TOP DETAILS				CASING DETAILS	
TVDPath	MDPath	Formation	TVD	MD	Name Size
1592.00	1592.00	GREEN RIVER	2799.00	2799.00	9 5/8" 9.625
1854.00	1854.00	BIRDSNEST	4356.00	4683.04	7" 7.000
2349.00	2349.00	MAHOGANY MARKER			
4346.00	4575.84	GREEN RIVER LOWER			



Plan: PLAN #1 PRELIMINARY (MU 921-19C1A-CMHZOH)
 Received By: [Signature] Date: March 04, 2013



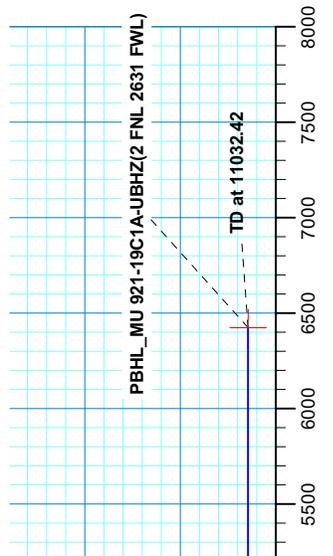
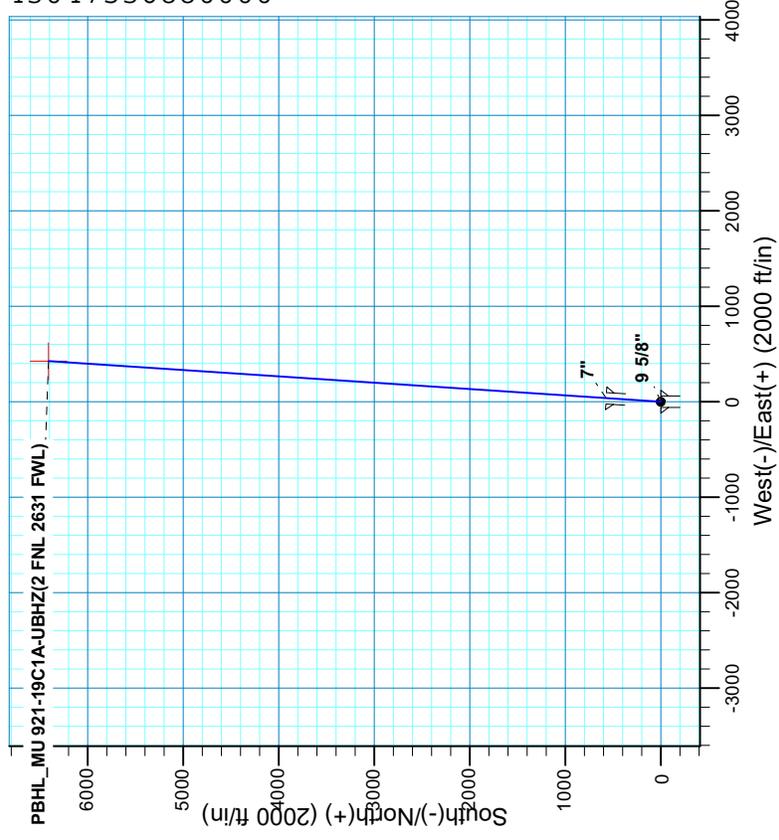
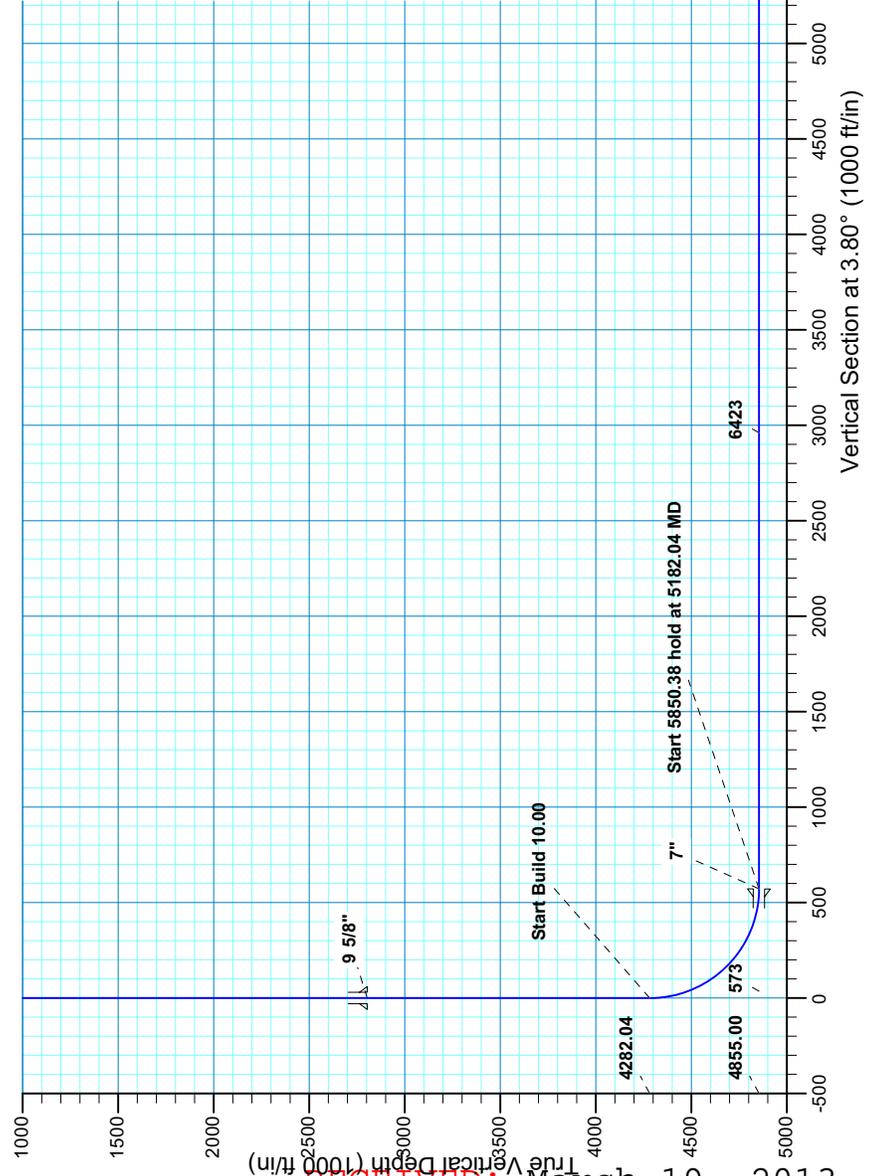
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30C PAD
 Well: MU 921-19C1A-UBHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



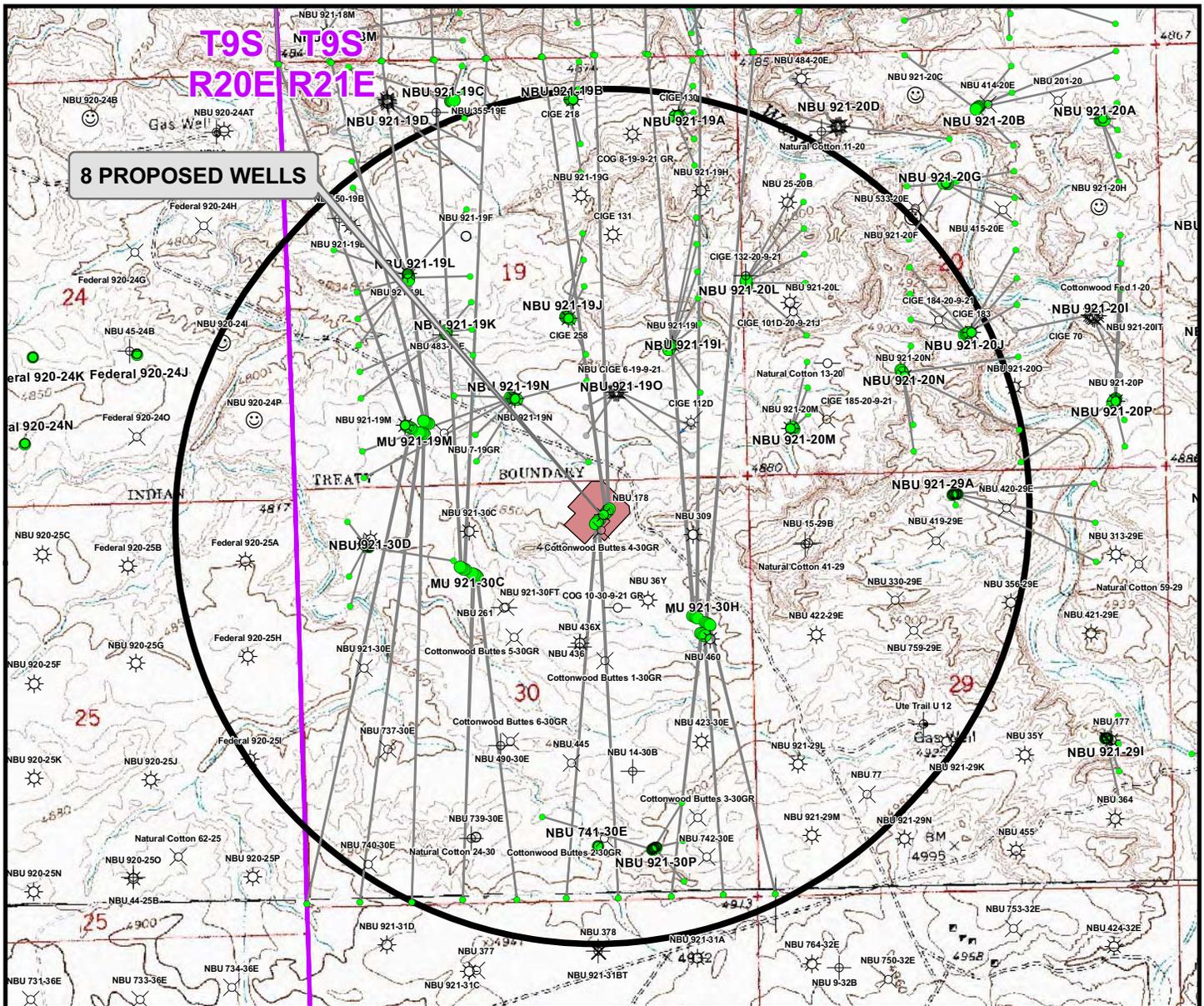
WELL DETAILS: MU 921-19C1A-UBHZ			
GL 4858 & KB 19			
@ 4877.00ft (ASSUMED)			
+N-S	+E-W	Northing	Eastng
0.00	0.00	14533234.91	2033283.66
Latitude	Longitude		
40.0112530	-109.5969900		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4282.04	0.00	0.00	4282.04	0.00	0.00	0.00	0.00	0.00	0.00
5182.04	90.00	3.80	4855.00	571.70	37.99	10.00	3.80	572.96	PBHL
11032.42	90.00	3.80	4855.00	6409.20	425.85	0.00	0.00	6423.33	PBHL

FORMATION TOP DETAILS			CASING DETAILS		
MDPath	Formation	TVD	MD	Name	Size
1596.00	GREEN RIVER	2803.00	2803.00	9 5/8"	9.625
1858.00	BIRDSNEST	4855.00	5182.04	7"	7.000
2353.00	MAHOGANY MARKER				
4351.00	GREEN RIVER LOWER				
4800.00	UTELAND BUTTE				



Plan: PLAN #1 PRELIMINARY (MU 921-19C1A-UBHZ)OH
 Received: March 04, 2013
 By: [Signature]



Well locations derived from Utah Division of Oil, Gas and Mining (UDOGM) (oilgas.ogm.utah.gov).
 The estimated distances from proposed bore locations to the nearest existing bore locations are based on UDOGM data.

Proposed Well	Nearest Well Bore	Footage	Proposed Well	Nearest Well Bore	Footage
MU 921-19B1B-CMHZ	CIGE 218	614ft	MU 921-30O4D-CMHZ	NBU 378	717ft
MU 921-19B1B-UBHZ	CIGE 218	614ft	MU 921-30O4D-UBHZ	NBU 378	717ft
MU 921-19B2A-CMHZ	CIGE 218	655ft	MU 921-30O3D-CMHZ	NBU 378	774ft
MU 921-19B2A-UBHZ	CIGE 218	655ft	MU 921-30O3D-UBHZ	NBU 378	774ft

Legend

- Well - Proposed
- Well Path
- ☀ Producing
- ⊕ Deferred
- ☀ Active Injector
- ⊕ Plugged & Abandoned
- Bottom Hole - Proposed
- Well Pad
- ☺ Spudded
- ⊗ Cancelled
- ⊗ Location Abandoned
- ⊗ Shut-In
- Bottom Hole - Existing
- ◻ Well - 1 Mile Radius
- APD Approved
- ⊖ Temporarily Abandoned
- ⊖ Preliminary Location

WELL PAD - MU 921-30B

TOPO C
 MU 921-19B1B-CMHZ, MU 921-19B1B-UBHZ,
 MU 921-19B2A-CMHZ, MU 921-19B2A-UBHZ,
 MU 921-30O4D-CMHZ, MU 921-30O4D-UBHZ,
 MU 921-30O3D-CMHZ & MU 921-30O3D-UBHZ
 LOCATED IN SECTION 30, T9S, R21E
 S.L.B.&M., Uintah County, Utah

Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street
 Denver, Colorado 80202



CONSULTING, LLC

2155 North Main Street
 Sheridan, Wyoming 82801
 Phone 307-674-0609
 Fax 307-674-0182

SCALE: 1" = 2,000ft	NAD83 USP Central	16
DRAWN: TL	DATE: 28 Sep 2012	
REVISED:	DATE:	

SHEET NO:

16 OF 20



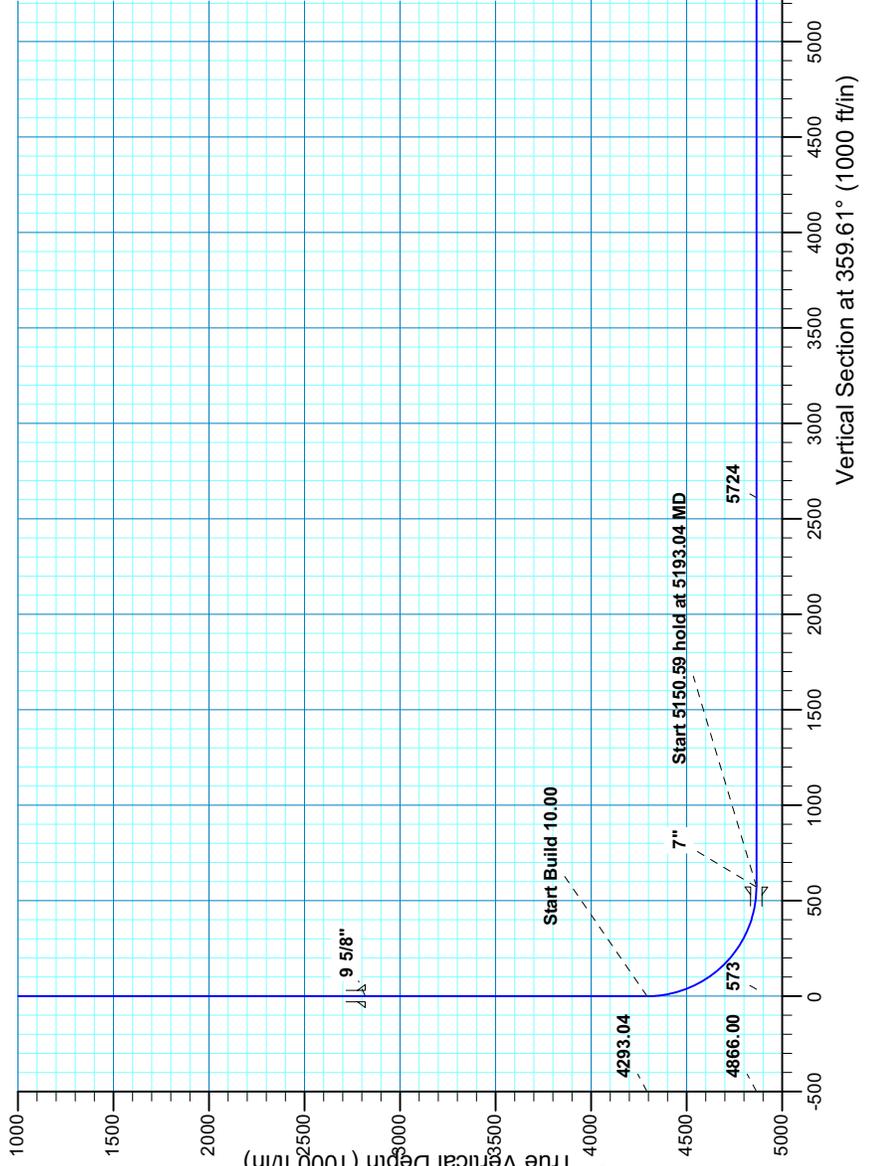
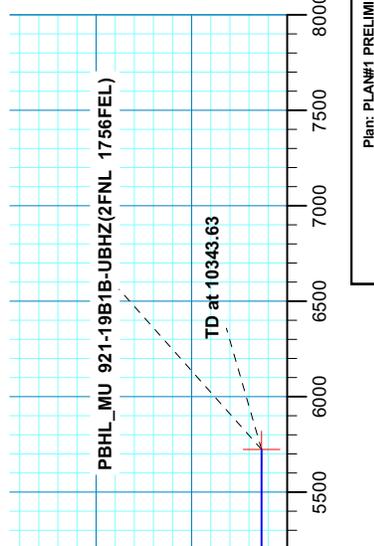
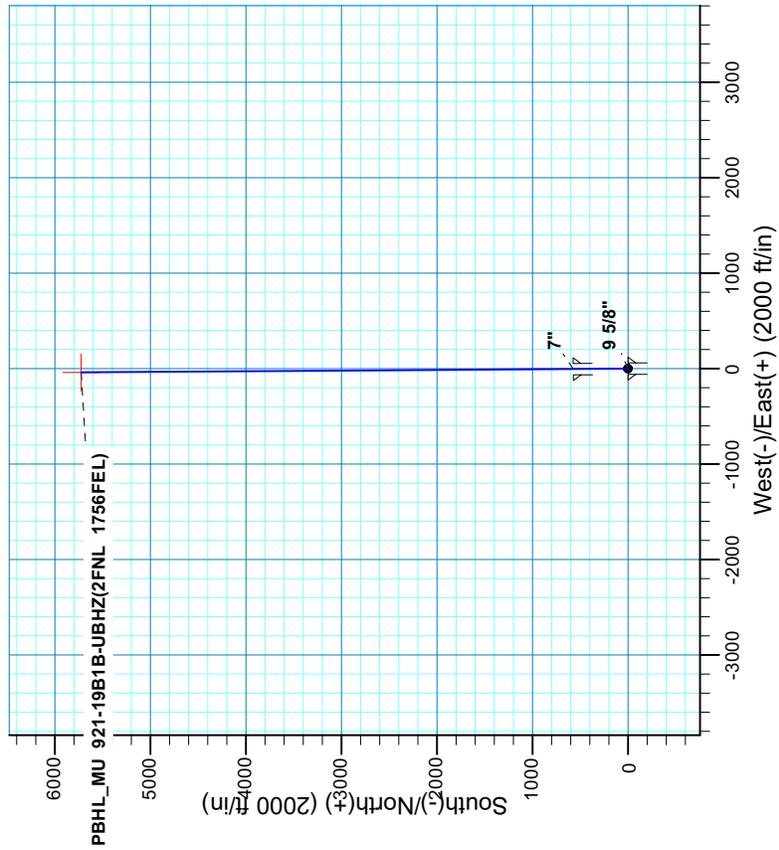
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30B PAD
 Well: MU 921-19B1B-UBHZ
 Wellbore: OH
 Design: PLAN#1 PRELIMINARY



WELL DETAILS: MU 921-19B1B-UBHZ			
GL 4853 & KB 19 @ 4872.00ft (ASSUMED)			
+N-S	+E-W	Northing	Eastng
0.00	0.00	14533953.79	2035097.67
Latitude	Longitude		
40.0131480	-109.5904730		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dieg	TFace	VFace	VTarget
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4293.04	0.00	0.00	4293.04	0.00	0.00	0.00	0.00	0.00	0.00
5193.04	90.00	359.61	4866.00	572.94	-3.90	10.00	359.61	572.96	572.96
10343.63	90.00	359.61	4866.00	5723.42	-38.93	0.00	0.00	5723.55	5723.55

FORMATION TOP DETAILS			CASING DETAILS		
MDPath	Formation	TVD	MD	Name	Size
1594.00	GREEN RIVER	2818.00	2818.00	9 5/8"	9.625
1866.00	BIRDSNEST	4866.00	4866.00	7"	7.000
2368.00	MAHOGANY				
4357.00	GREEN RIVER LOWER				
4811.00	UTELAND BUTTES				



Plan: PLAN#1 PRELIMINARY (MU 921-19B1B-UBHZ/OH)
Received: March 08, 2013
 Scientific Drilling, Inc.

RECEIVED: March 19, 2013



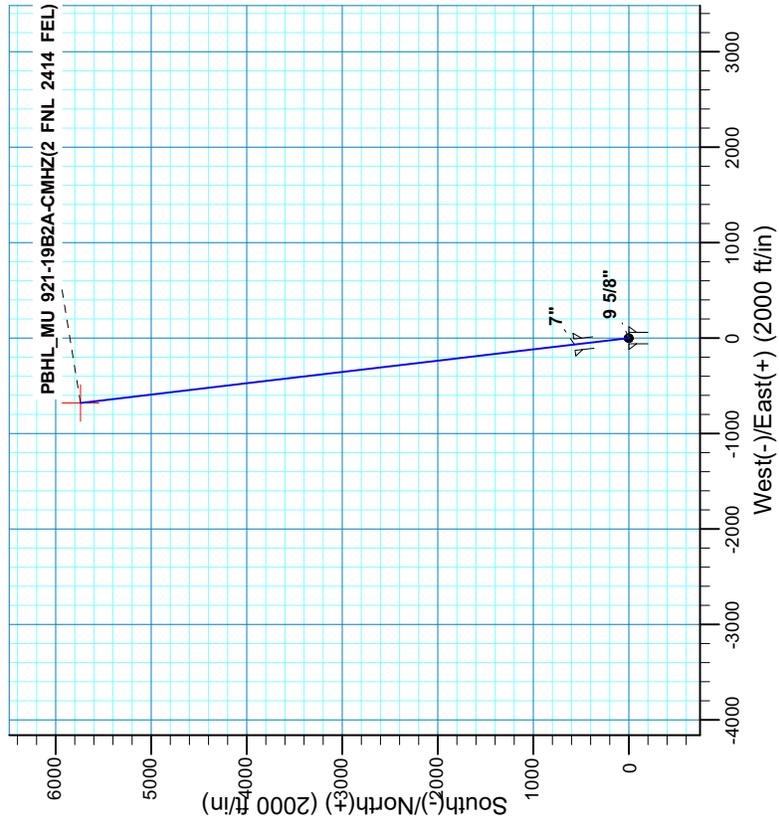
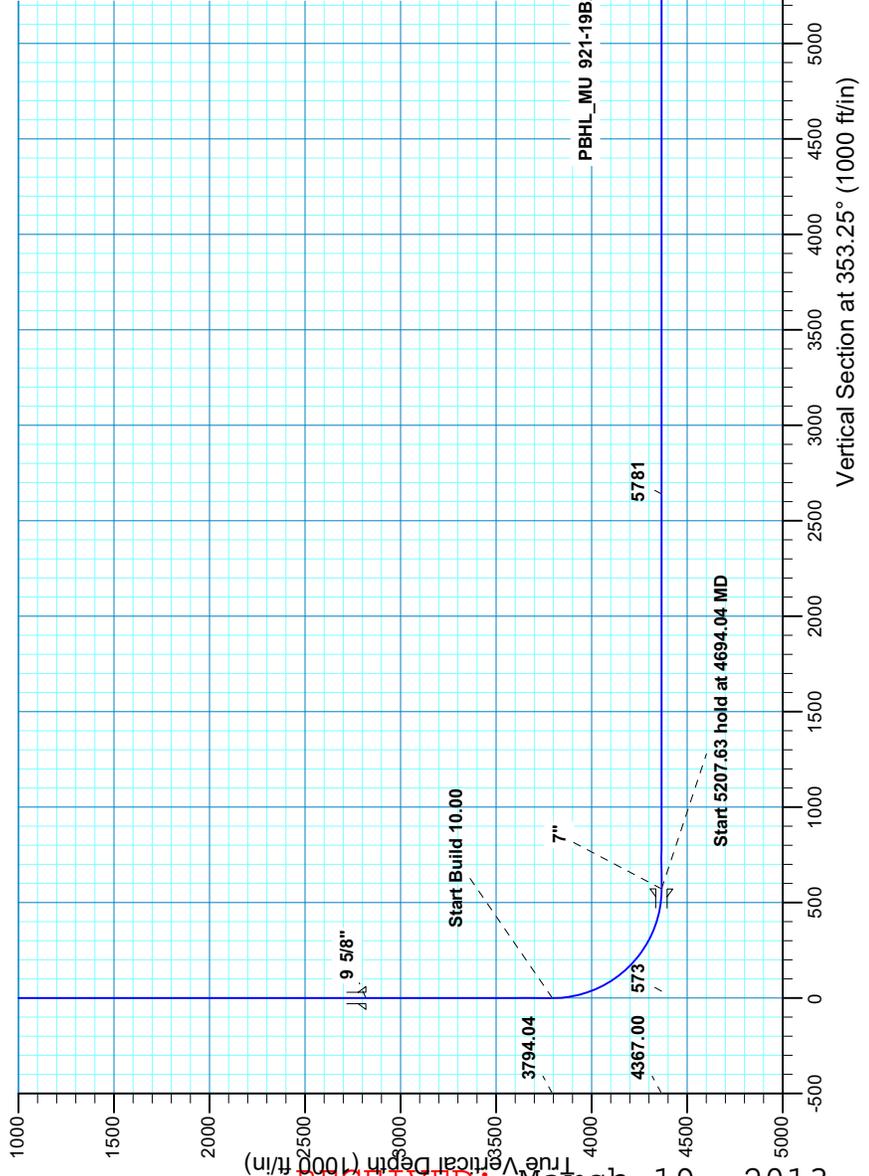
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30B PAD
 Well: MU 921-19B2A-CMHZ
 Wellbore: OH
 Design: PLAN#1 PRELIMINARY



WELL DETAILS: MU 921-19B2A-CMHZ			
GL-4853 & KB.19 @ 4872.00R (ASSUMED)			
A			
+N-S	+E-W	Northing	Eastng
0.00	0.00	14533935.67	2035080.60
		Latitude	Longitude
		40.0130990	-109.5905350

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3794.04	0.00	0.00	3794.04	0.00	0.00	0.00	0.00	0.00	0.00
4694.04	90.00	353.25	4367.00	568.99	-67.33	10.00	353.25	572.96	PBHL_MU 921-19B2A-CMHZ
9901.67	90.00	353.25	4367.00	5740.54	-679.27	0.00	0.00	5760.59	

FORMATION TOP DETAILS			CASING DETAILS		
TVDPath	Formation	TVD	MD	Name	Size
1594.00	GREEN RIVER	2818.00	2818.00	9 5/8"	9.625
1865.00	BIRDSNEST	4367.00	4367.00	7"	7.000
2368.00	MAHOGANY				
4357.00	GREEN RIVER LOWER				



Plan: PLAN#1 PRELIMINARY (MU 921-19B2A-CMHZ/OH)
 Received: March 08, 2013
 Scanned: March 08, 2013



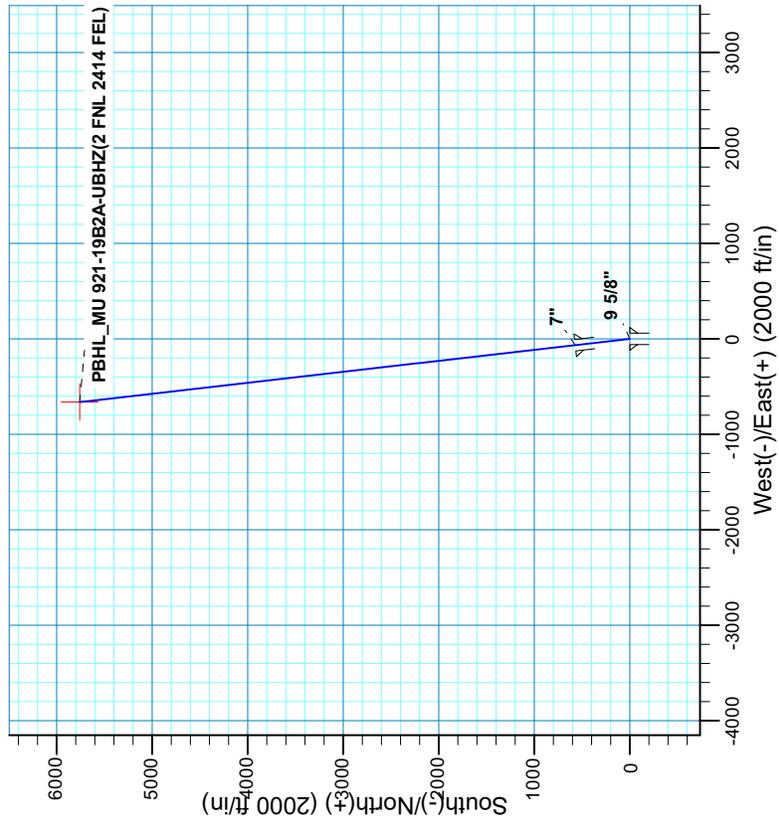
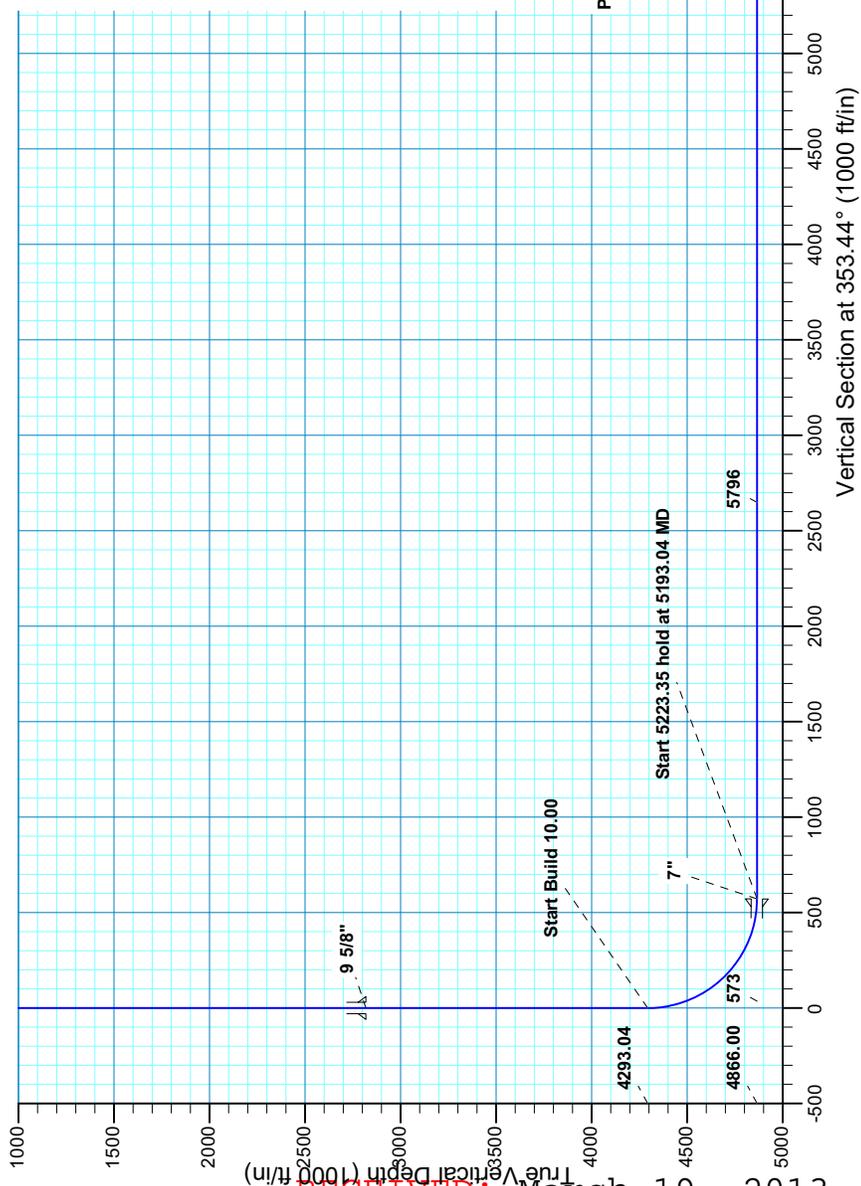
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30B PAD
 Well: MU 921-19B2A-UBHZ
 Wellbore: OH
 Design: PLAN#1 PRELIMINARY



WELL DETAILS: MU 921-19B2A-UBHZ			
GL 4853 & KB 19 @ 4872.00ft (ASSUMED)			
+N/-S	+E/-W	Northing	Eastng
0.00	0.00	14533917.55	2035063.52
Latitude	Longitude		
40.0130900	-109.5905970		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4293.04	0.00	0.00	4293.04	0.00	0.00	0.00	0.00	0.00	0.00
5193.04	90.00	353.44	4866.00	569.21	-65.43	10.00	353.44	572.96	
10416.39	90.00	353.44	4866.00	5758.39	-661.91	0.00	0.00	5796.30	PBHL_MU 921-19B2A-UBHZ

FORMATION TOP DETAILS			CASING DETAILS		
MDPath	Formation	TVD	MD	Name	Size
1594.00	GREEN RIVER	2818.00	2818.00	9 5/8"	9.625
1865.00	BIRDSNEST	4866.00	4866.00	7"	7.000
2368.00	MAHOGANY				
4357.00	GREEN RIVER LOWER				
4811.00	UTELAND BUTTES				



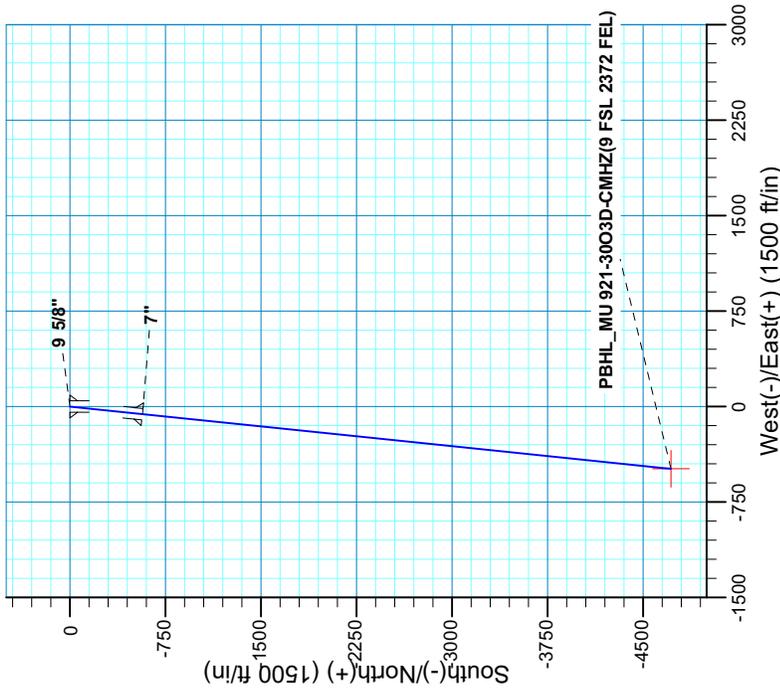
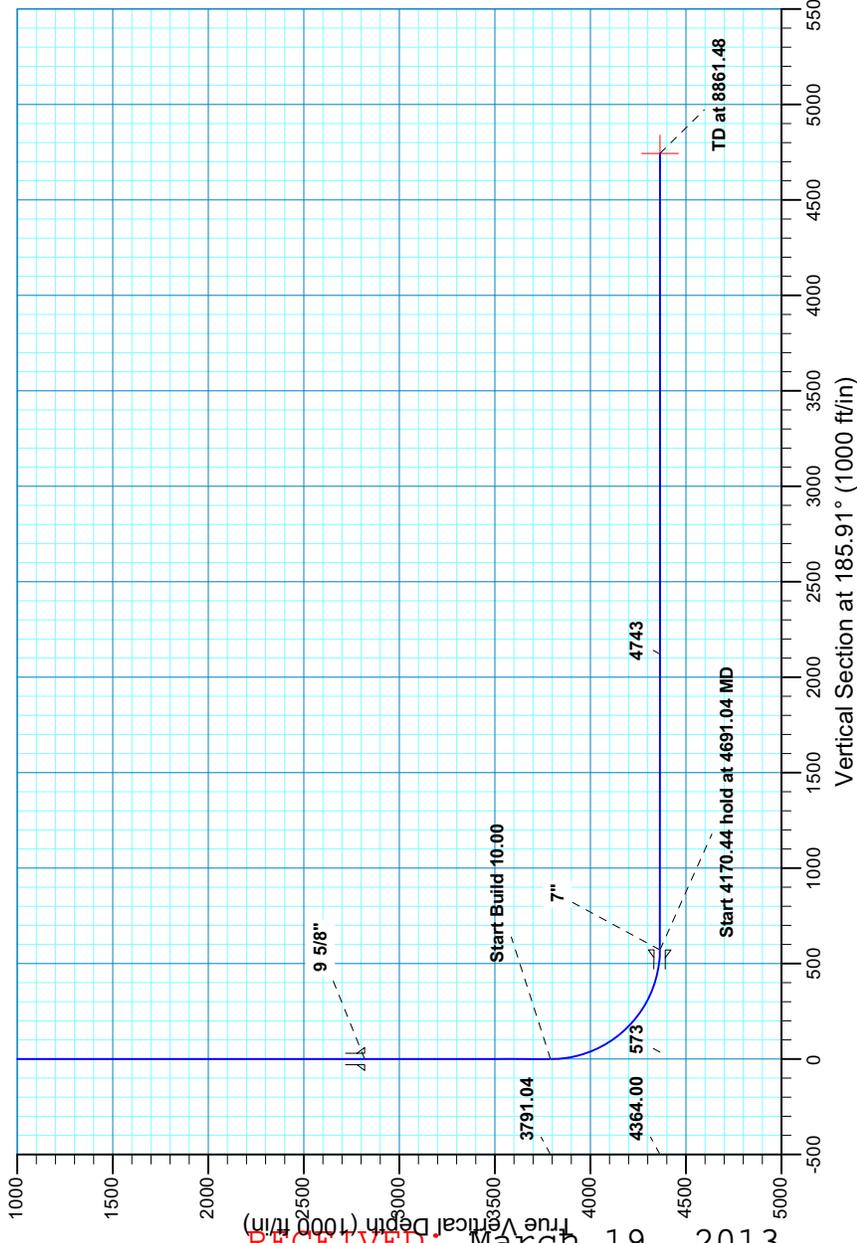
Plan: PLAN#1 PRELIMINARY (MU 921-19B2A-UBHZ/OH)
Received: March 08, 2013
 Date: 3/8/2013 11:11 AM



Project: UTAH - UTM (feet), NAD27, Zone
 Site: MU 921-30B PAD
 Well: MU 921-30O3D-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: MU 921-30O3D-CMHZ											
GL 4853 & KB 19 @ 4872.00ft (ASSUMED)											
+N/S	0.00	Longitude	-109.5909720								
+E/W	0.00	Latitude	40.0127560								
+N/S	0.00	Northing	14533808.83								
+E/W	0.00	Easting	2034960.20								
SECTION DETAILS											
MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	Vsect	Target		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3791.04	0.00	0.00	3791.04	0.00	0.00	0.00	0.00	0.00	0.00		
4691.04	90.00	185.91	4364.00	-569.91	-56.98	10.00	185.91	572.96			
8861.48	90.00	185.91	4364.00	-4718.20	-488.25	0.00	0.00	4743.40	PBHL_MU 921-30O3D-CMHZ(9 FSL 2372 FEL)		
FORMATION TOP DETAILS		CASING DETAILS									
TVDPath	MDPath	Formation	TVD	MD	Name	Size					
1593.00	1593.00	GREEN RIVER	2816.00	2818.00	9 5/8"	9.625					
1863.00	1863.00	BIRDSNEST	4364.00	4369.04	7"	7.000					
2368.00	2368.00	MAHOAGANY									
4354.00	4583.84	GREEN RIVER LOWER									



RECEIVED: March 19, 2013

Plan: PLAN #1 PRELIMINARY (MU 921-30O3D-CMHZ)OH
 Received: March 08, 2013
 10:27 AM
 10/27/2013



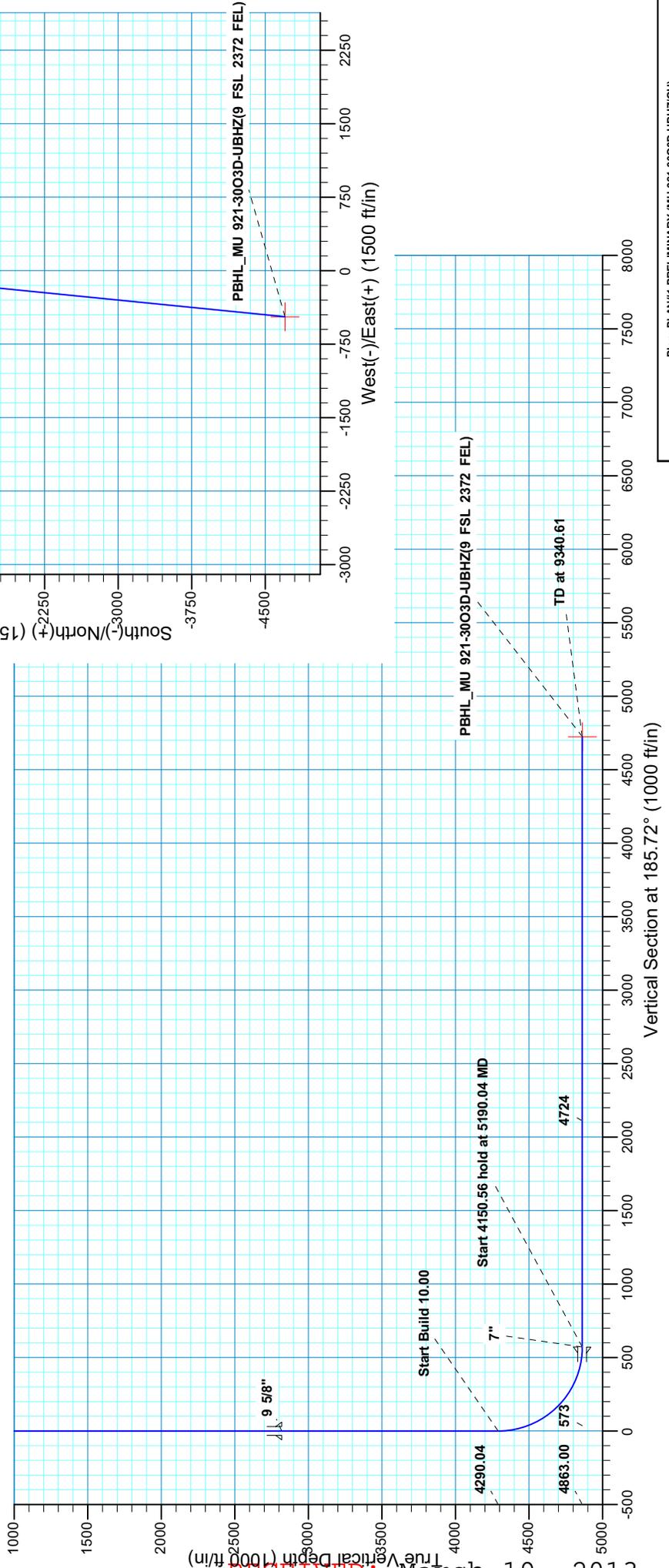
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30B PAD
 Well: MU 921-3003D-JBHZ
 Wellbore: OH
 Design: PLAN#1 PRELIMINARY



WELL DETAILS: MU 921-3003D-JBHZ			
GL 4853 & KB 19 @ 4872.00ft (ASSUMED)			
+N-S	+E-W	Northing	Eastng
0.00	0.00	14533790.34	2034943.13
Latitude	Longitude		
40.0127060	-109.5910340		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dieg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4290.04	0.00	0.00	4290.04	0.00	0.00	0.00	0.00	0.00	0.00
5190.04	90.00	185.72	4863.00	-570.10	-57.12	10.00	185.72	572.96	PBHL_MU 921-3003D-JBHZ
9340.61	90.00	185.72	4863.00	-4899.99	-470.88	0.00	0.00	4723.52	

FORMATION TOP DETAILS			CASING DETAILS		
MDPath	Formation	TVD	MD	Name	Size
1592.00	GREEN RIVER	2818.00	2818.00	9 5/8"	9.625
1863.00	BIRDSNEST	4863.00	4863.00	7"	7.000
2368.00	MAHOGANY				
4354.00	GREEN RIVER LOWER				
4808.00	UTELAND BUTTES				



Plan: PLAN#1 PRELIMINARY (MU 921-3003D-JBHZ/OH)
 Received: March 08, 2013



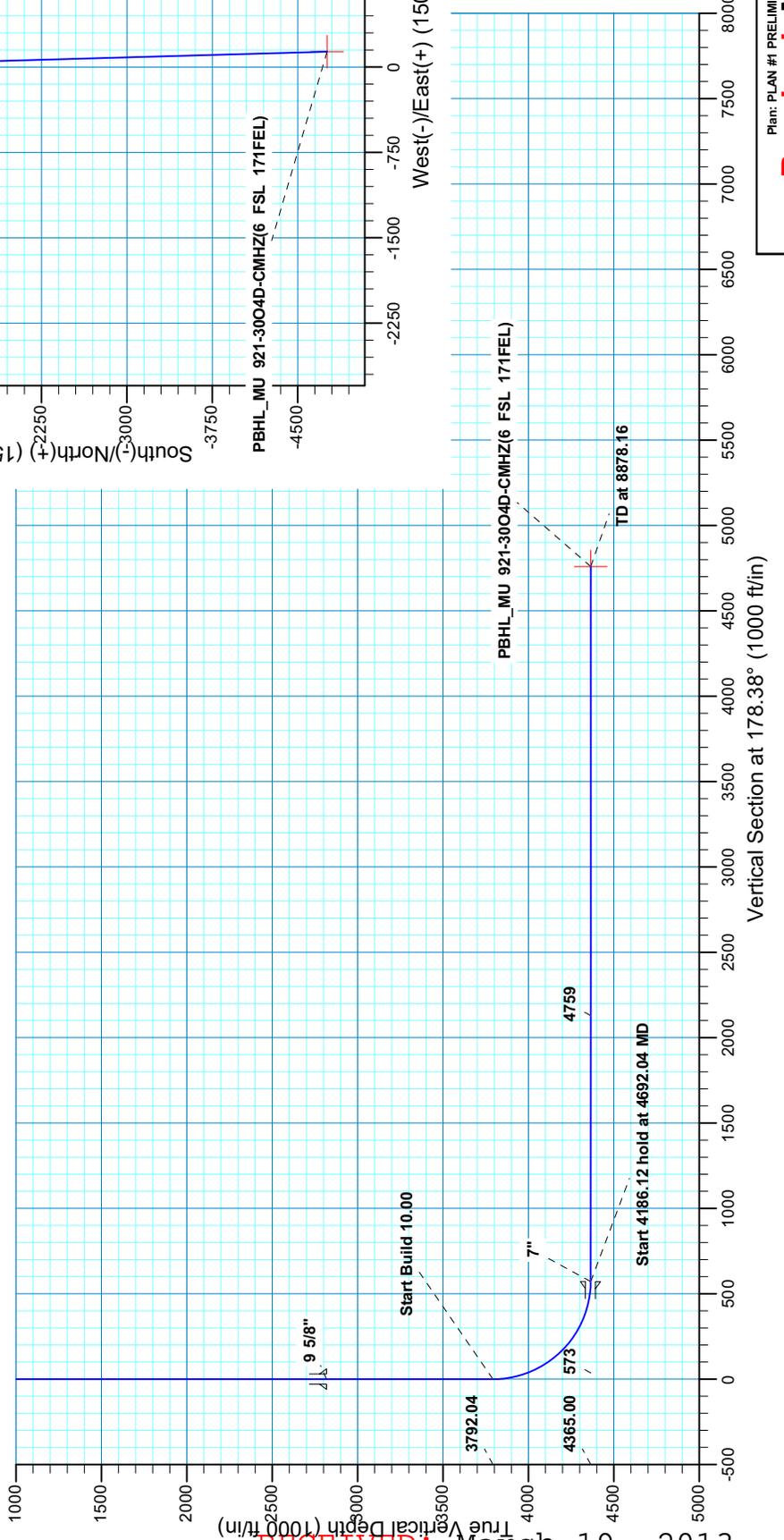
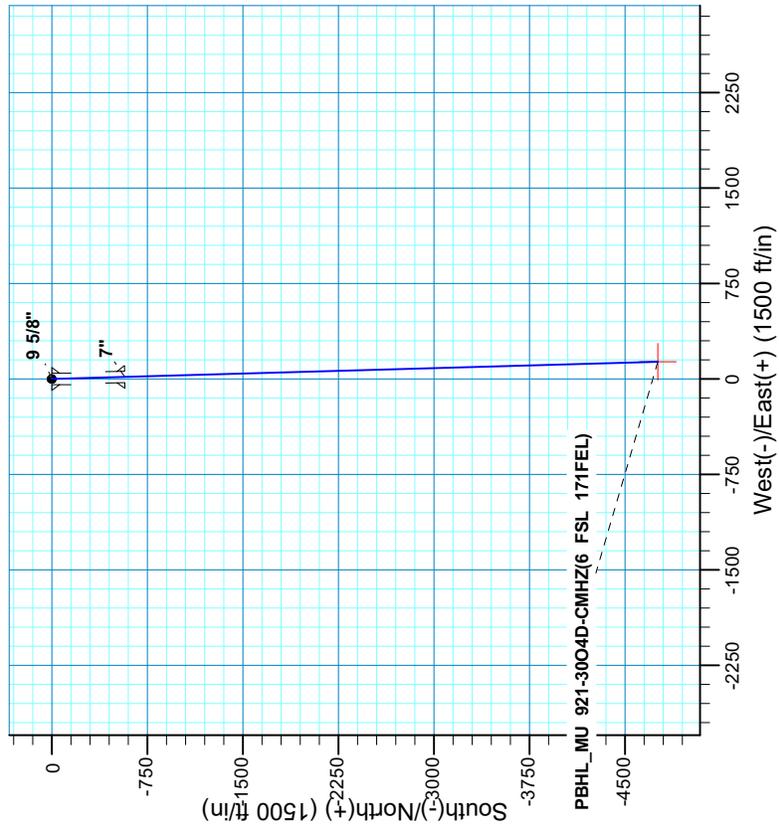
Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30B PAD
 Well: MU 921-3004D-CMHZ
 Wellbore: OH
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: MU 921-3004D-CMHZ			
GL 4853 & KB 19 @ 4872.00ft (ASSUMED)			
+N/-S	+E/-W	Northing	Eastng
0.00	0.00	14533844.70	2034994.65
Latitude	Longitude		
40.0128530	-109.5908470		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3792.04	0.00	0.00	3792.04	0.00	0.00	0.00	0.00	0.00	0.00
4692.04	90.00	178.38	4365.00	-572.73	16.19	10.00	178.38	572.96	PBHL_MU 921-3004D-CMHZ
8878.16	90.00	178.38	4365.00	-4757.18	134.44	0.00	0.00	4759.08	

FORMATION TOP DETAILS				CASING DETAILS	
MDPath	Formation	TVD	MD	Name	Size
1593.00	GREEN RIVER	2818.00	2818.00	9 5/8"	9.625
1864.00	BIRDSNEST	4365.00	4692.04	7"	7.000
2368.00	MAHOGANY				
4355.00	GREEN RIVER LOWER				



Plan: PLAN #1 PRELIMINARY (MU 921-3004D-CMHZ(OH))
Received: March 08, 2013
 Scientific Drilling, Inc.

RECEIVED: March 19, 2013



Project: UTAH - UTM (feet), NAD27, Zone 12N
 Site: MU 921-30B PAD
 Well: MU 921-3004D-UBHZ
 Wellbore: OH
 Design: PLAN#1 PRELIMINARY



WELL DETAILS: MU 921-3004D-UBHZ
 @ 4872.00ft (ASSUMED)
 GL 4853 & KB 13

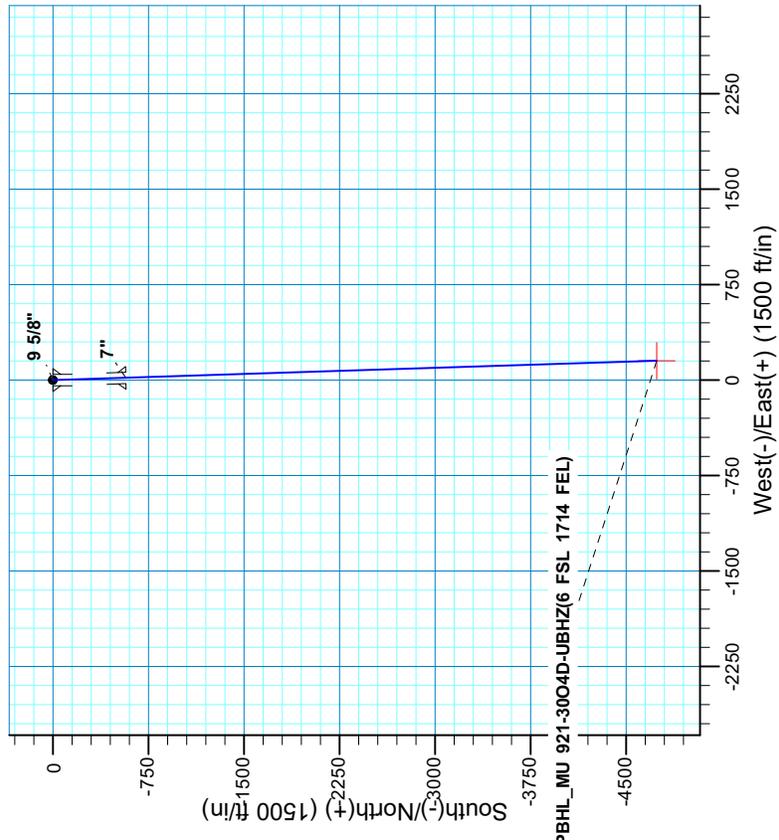
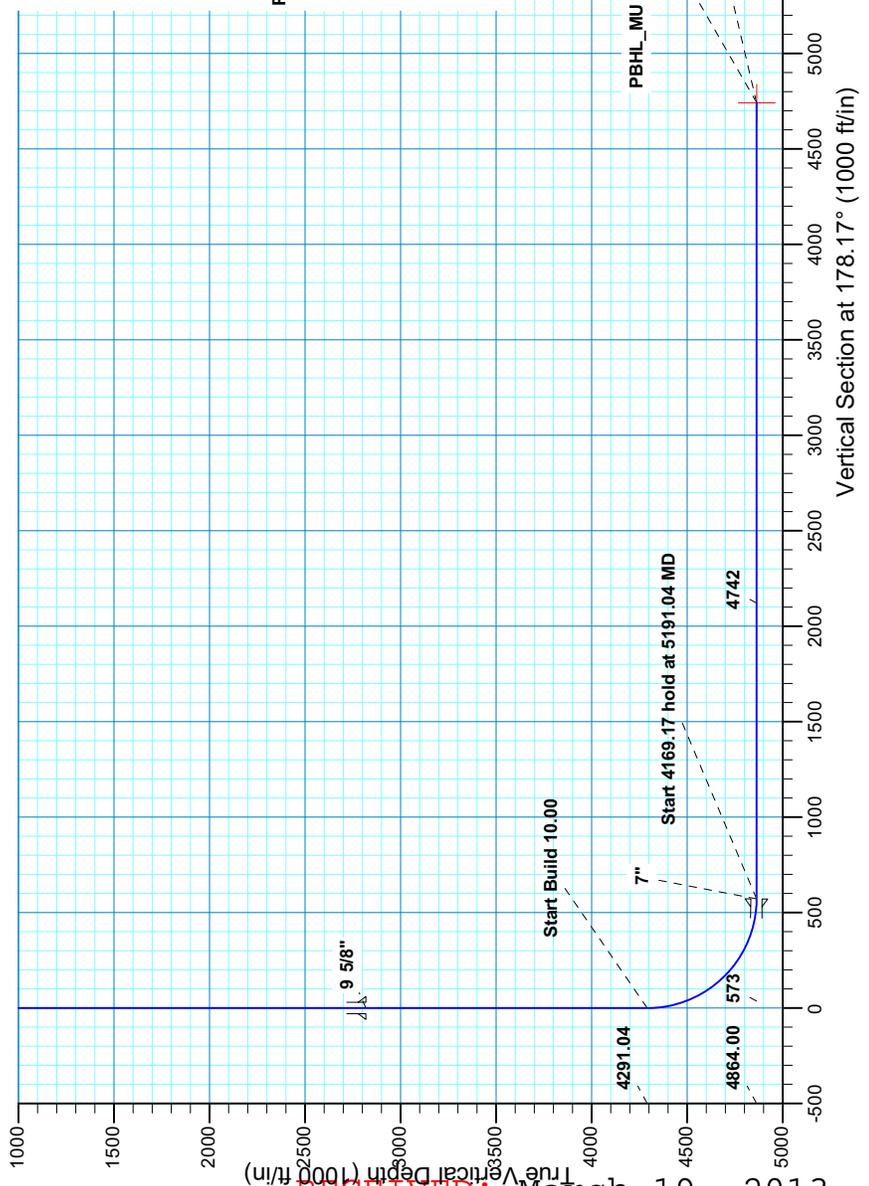
+N-S	+E-W	Northing	Eastng	Latitude	Longitude
0.00	0.00	14533826.95	2034977.56	40.0128050	-109.5909090

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dieg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4291.04	0.00	0.00	4291.04	0.00	0.00	0.00	0.00	0.00	0.00
5191.04	90.00	178.17	4864.00	-572.66	18.34	10.00	178.17	572.96	
9360.21	90.00	178.17	4864.00	-4739.70	151.80	0.00	0.00	4742.13	PBHL_MU 921-3004D-UBHZ/6

FORMATION TOP DETAILS

MDPath	Formation	TVD	MD	Name	Size
1593.00	GREEN RIVER	2818.00	2818.00	9 5/8"	9.625
1864.00	BIRDSNEST	4864.00	4864.00	7"	7.000
2368.00	MAHOGANY				
4355.00	GREEN RIVER LOWER				
4809.00	UTELAND BUTTES				



Plan: PLAN#1 PRELIMINARY (MU 921-3004D-UBHZ/OH)
 Received: March 08, 2013

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 3/13/2013

API NO. ASSIGNED: 43047536880000

WELL NAME: MU 921-19C1A-CMHZ

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

PHONE NUMBER: 720 929-6029

CONTACT: Cara Mahler

PROPOSED LOCATION: NENW 30 090S 210E

Permit Tech Review:

SURFACE: 1105 FNL 2127 FWL

Engineering Review:

BOTTOM: 0002 FNL 2631 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.01107

LONGITUDE: -109.59755

UTM SURF EASTINGS: 619695.00

NORTHINGS: 4429927.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU0581

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - WYB000291
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 43-8496
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
- Unit: MAVERICK
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 197-13
- Effective Date: 8/21/2012
- Siting: Suspends General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason
17 - Oil Shale 190-5(b) - dmason
27 - Other - bhll



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: MU 921-19C1A-CMHZ
API Well Number: 43047536880000
Lease Number: UTU0581
Surface Owner: FEDERAL
Approval Date: 3/20/2013

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 197-13. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

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.

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

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 at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JAN 18 2013

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER BLM

5. Lease Serial No. UTU0581	
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No. UTU88574X	
8. Lease Name and Well No. MU 921-19C1A-CMHZ	
9. API Well No. 4304753688	
10. Field and Pool, or Exploratory NATURAL BUTTES	
11. Sec., T., R., M., or Blk. and Survey or Area Sec 30 T9S R21E Mer SLB	
12. County or Parish UINTAH	13. State UT
17. Spacing Unit dedicated to this well	
20. BLM/BIA Bond No. on file WYB000291	
23. Estimated duration 60-90 DAYS	

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone	
2. Name of Operator KERR MCGEE OIL & GAS LP Contact: CARA MAHLER E-Mail: cara.mahler@anadarko.com	
3a. Address PO BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (include area code) Ph: 720-929-6029 Fx: 720-929-7029
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW 1105FNL 2127FWL 40.011185 N Lat, 109.597602 W Lon At proposed prod. zone NENW 2FNL 2631FWL 40.028815 N Lat, 109.596159 W Lon <i>Sec 19</i>	
14. Distance in miles and direction from nearest town or post office* 46.4 MILES FROM VERNAL UTAH	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 472'	16. No. of Acres in Lease 2399.60
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 925'	19. Proposed Depth 10544 MD 4356 TVD
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4858 GL	22. Approximate date work will start 07/07/2013

RECEIVED
SEP 05 2013
DIV. OF OIL, GAS & MINING

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) CARA MAHLER Ph: 720-929-6029	Date 01/15/2013
Title REGULATORY ANALYST		
Approved by (Signature) <i>Jerry Kenczka</i>	Name (Printed/Typed) Jerry Kenczka	Date AUG 20 2013
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #183444 verified by the BLM Well Information System
For KERR MCGEE OIL & GAS LP, sent to the Vernal
Committed to AFMSS for processing by JOHNETTA MAGEE on 01/25/2013 ()

UDOGM

NOTICE OF APPROVAL
CONDITIONS OF APPROVAL ATTACHED

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

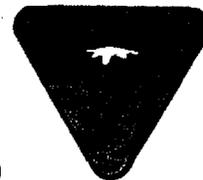


UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr McGee Oil & Gas Onshore
Well No: MU 921-19C1A-CMHZ
API No: 43-047-53688

Location: NENW, Sec. 30, T9S, R21E
Lease No: UTU-0581
Agreement: MAVERICK UNIT

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

Site Specific COA's

MU 921-19C Pad

- Mitigation measures can be found in Appendix B, Table B-2, of the GNB ROD (BLM 2012b) under the following sections of the table:
 - Air Quality
 - Soils
 - Vegetation: *Sclerocactus wetlandicus*
 - Wildlife: Colorado River Fish
- Where populations or individuals of *Sclerocactus wetlandicus* are located within 300 feet of the proposed edge of project ROWs, the following actions will be taken to minimize impacts:
 - Silt fencing will be used to protect cacti that are within 300 feet and downslope or downwind of surface disturbance. Fencing is intended to prevent sedimentation or dust deposition and will be evaluated for effectiveness by a qualified botanist.
 - A qualified botanist will be on site to monitor surface-disturbing activities when cacti are within 300 feet of any surface disturbance.
 - Dust abatement (consisting of water only) will occur during construction where plants are closer than 300 feet from surface-disturbing activities.
 - Cacti within 300 feet of proposed surface disturbance will be flagged immediately prior to surface-disturbing activities and flags will be removed immediately after surface-disturbing activities are completed. Leaving cacti flagged for as short a time as possible will minimize drawing attention to the cacti location and reduce potential for theft.
 - Pipelines will be sited to maximize distance from adjacent cacti locations.
 - Project personnel associated with construction activities will be instructed to drive at a speed limit of 15 miles per hour on unpaved roads and remain in existing roadway ROWs at all times.
- For permanent surface pipelines, KMG will adhere to existing cacti survey/buffer guidelines of 300 feet, or amended guidelines if developed by the BLM and USFWS. In areas where avoidance by

300 feet is not feasible and populations or individuals of *Sclerocactus wetlandicus* are within 50 feet of proposed project components, the following actions will be taken to minimize impacts:

- Prior to construction, flag individual cactus. Once pipe installation is complete, remove the flagging.
- Prior to construction, install protective fencing around the cacti if they are down gradient of the surface pipe. Once pipe installation is complete, remove the protective fencing.
- A qualified botanist will be present during construction to monitor surface line installation.
- The following considerations are required for those wells where KMG deems completion fluid recycling is appropriate based on new well density and topography:
 - Temporary lines associated with recycling of completion water will be sited in existing ROWs. The pressure in the lines is less than 50 pounds per square inch and the lines are constructed of rigid aluminum; therefore, virtually no movement will occur during operation.
 - If surface water completion lines are placed within the footprint of a road disturbance where vegetation does not grow, *Sclerocactus wetlandicus* surveys will not be necessary.
 - A qualified botanist will survey a 50-foot-wide corridor along roads where temporary lines are planned to ensure *Sclerocactus wetlandicus* is not present.
 - If cacti are present within the 50-foot-wide survey corridor and avoidance is necessary (to ensure the line is more than 50 feet away from identified cactus), the new alignment will, if possible, be such that the cacti are topographically higher than the re-aligned line so a potential spill from the line will not impact the identified cacti.
 - If it is not possible to re-align the surface lines to avoid individuals or populations of the *Sclerocactus wetlandicus* that are within 50 feet of surface disturbance, the following actions will be taken to minimize impacts:
 - Prior to construction, KMG will flag individual cacti. Once pipe installation is complete, remove the flagging.
 - Prior to construction, KMG will install protective fencing around the cacti if they are down gradient of the surface pipe. Once pipe installation is complete, remove the protective fencing.
 - A qualified botanist will be present during construction to monitor surface line installation.
- Avoidance of cactus by 300 feet will take priority in the expansion of pads within the cactus core conservation areas. When the 300-foot buffer cannot be avoided in pad expansion, KMG will notify the USFWS and work with the BLM to determine pad expansion that places a priority on avoiding cactus impacts.
- KMG will follow existing ROWs and/or roads in constructing new buried pipelines within the cactus core conservation areas. For instance, where a new buried pipeline is unable to follow an existing ROW and/or road and exceeds 600 feet in length, KMG will work with the USFWS and the BLM to determine a route that places a priority on avoiding cactus impacts.
- Maintenance activities on pipelines within cactus core conservation areas will avoid impacts to cactus, to the extent possible.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established

- Noxious and invasive weeds will be controlled throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an integrated pest management program is applicable, coordination has been undertaken with the state and local management program (if existing). A copy of the pest management plan will be submitted for each project.
- A pesticide use permit (PUP) will be obtained for the project, if applicable.
- Bird exclusion netting will be installed over reserve pits containing water that are left open for more than 30 days to reduce possibility of exposure to hazardous chemicals (BLM 2012b).
- KMG will install bird-excluding devices that prevent the perching and entry of migratory birds on or into its new fired vessel exhaust stacks (BLM 2012b).
- Tree removal within pinyon-juniper habitat will occur outside of the nesting season for migratory birds (approximately 4/1 to 7/31 (BLM 2012b).

- Paint facilities "Shadow Gray."
- Save and segregate the top six (6) inches of topsoil during well pad construction.
- Conduct a raptor survey prior to construction operations if such activities would take place during raptor nesting season (January 1 through September 30). If active raptor nests are identified during the survey, operations should be conducted according to the seasonal restrictions detailed in the Uinta Basin-specific RMP guidelines BLM 2008a.
- If construction and/or drilling operations have not been initiated prior to September 26, 2013, conduct a biological survey to determine the presence of Uinta Basin hookless cactus in accordance with the guidelines specified in the USFWS Rare Plant Conservation Measures and the BLM RMP ROD. KMG will implement commitments contained in the GNB BO.
- Monitor construction activities with a permitted archaeologist.
- Utilize applicable erosion BMPs to protect fill slopes.
- Double-line the reserve/completion pit.

- If any blasting is needed during construction activities, the Operator must notify any active Gilsonite operation located within two miles of the location 48 hours prior to the blasting.
- Damage to livestock and livestock facilities would be reported as quickly as possible to the BLM and affected livestock operators. Operators would develop and employ prevention measures to avoid damaging fences, gates, and cattleguards, including upgrading cattleguard gate widths and load-bearing requirements and fencing all open pits and cellars.
- If partial or complete removal of a fence cannot be avoided, the fence would be braced and tied off per the BLM guidance. Where the fence is crossed by a road, the fence would be braced and a cattleguard and gate installed per BLM guidance.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

- Cement for the Intermediate casing shall be brought 200 feet above the surface casing shoe.
- A CBL shall be run from TD to TOC in the intermediate casing.
- Cement for the surface casing shall be circulated to the surface.
- Variances shall be granted as requested in Section 9 of the drilling plan.
- A variance is granted for the FIT test requirement.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
1. TYPE OF WELL Oil Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU0581
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	7. UNIT or CA AGREEMENT NAME: MAVERICK
PHONE NUMBER: 720 929-6100	8. WELL NAME and NUMBER: MU 921-19C1A-CMHZ
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1105 FNL 2127 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 30 Township: 09.0S Range: 21.0E Meridian: S	9. API NUMBER: 43047536880000
	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: UINTAH
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/20/2014	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

Approved by the Utah Division of Oil, Gas and Mining
Date: February 12, 2014
By:

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 2/7/2014	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047536880000

API: 43047536880000

Well Name: MU 921-19C1A-CMHZ

Location: 1105 FNL 2127 FWL QTR NENW SEC 30 TWNP 090S RNG 210E MER S

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

Date Original Permit Issued: 3/20/2013

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

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

Signature: Teena Paulo

Date: 2/7/2014

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

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU0581
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: MAVERICK
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: MU 921-19C1A-CMHZ
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1105 FNL 2127 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 30 Township: 09.0S Range: 21.0E Meridian: S	9. API NUMBER: 43047536880000
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	COUNTY: Uintah
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	STATE: UTAH

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 2/6/2015	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

Approved by the
Feb 09, 2015
Oil, Gas and Mining

Date: _____

By:

NAME (PLEASE PRINT) Joel Malefy	PHONE NUMBER 720 929-6828	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 2/6/2015	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047536880000

API: 43047536880000

Well Name: MU 921-19C1A-CMHZ

Location: 1105 FNL 2127 FWL QTR NENW SEC 30 TWNP 090S RNG 210E MER S

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

Date Original Permit Issued: 3/20/2013

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

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

Signature: Joel Malefyt

Date: 2/6/2015

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

MAY 19 2015

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS **BLM**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU0581
2. Name of Operator KERR-MCGEE OIL & GAS ONSHORE		6. If Indian, Allottee or Tribe Name
3a. Address P.O. BOX 173779 1099 18TH STREET STE 600 DENVER, CO 80217		7. If Unit or CA/Agreement, Name and/or No. UTU88574X
3b. Phone No. (include area code) Ph: 720-929-6808		8. Well Name and No. MU 921-19C1A-CMHZ
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 30 T9S R21E Mer SLB NENW 1105FNL 2127FWL		9. API Well No. 43-047-53688
		10. Field and Pool, or Exploratory NATURAL BUTTES
		11. County or Parish, and State UINTAH COUNTY, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A PD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

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

APD - 8/20/13

NEPA - 2013-165 EA

VERNAL FIELD OFFICE	
ENG.	<i>RPL 6/4/15</i>
GEOL.	_____
E.S.	_____
PET.	_____
RECL.	_____

RECEIVED

JUN 15 2015

DIV. OF OIL, GAS & MINING

CONDITIONS OF APPROVAL ATTACHED

14. I hereby certify that the foregoing is true and correct. Electronic Submission #302211 verified by the BLM Well Information System For KERR-MCGEE OIL & GAS ONSHORE L, sent to the Vernal Committed to AFMSS for processing by JOHNETTA MAGEE on 05/21/2015 ()	
Name (Printed/Typed) JENNIFER THOMAS	Title REGULATORY SPECIALIST
Signature _____ (Electronic Submission)	Date 05/19/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>[Signature]</i>	Title Assistant Field Manager Lands & Mineral Resources	JUN 05 2015
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office VERNAL FIELD OFFICE	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

UDOGM

CONDITIONS OF APPROVAL

Kerr McGee Oil and Gas Onshore LP.

Notice of Intent APD Extension

Lease: UTU-0581
Well: MU 921-19C1A-CMHZ
Location: NENW Sec 30-T9S-R21E

An extension for the referenced APD is granted with the following conditions:

1. The extension and APD shall expire on 08/20/2017.
2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Robin L Hansen of this office at (435) 781-2777

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
1. TYPE OF WELL Oil Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU0581
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	7. UNIT or CA AGREEMENT NAME: MAVERICK
PHONE NUMBER: 720 929-6507	8. WELL NAME and NUMBER: MU 921-19C1A-CMHZ
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1105 FNL 2127 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 30 Township: 09.0S Range: 21.0E Meridian: S	9. API NUMBER: 43047536880000
	9. FIELD and POOL or WILDCAT: SOUTHERN BUTTES
	COUNTY: Uintah
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 2/26/2016	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

Approved by the
February 29, 2016
Oil, Gas and Mining

Date: _____
By:

NAME (PLEASE PRINT) Jennifer Thomas	PHONE NUMBER 720 929-6808	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 2/26/2016	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047536880000

API: 43047536880000

Well Name: MU 921-19C1A-CMHZ

Location: 1105 FNL 2127 FWL QTR NENW SEC 30 TWNP 090S RNG 210E MER S

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

Date Original Permit Issued: 3/20/2013

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

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- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
- Has the approved source of water for drilling changed? Yes No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
- Is bonding still in place, which covers this proposed well? Yes No

Signature: Jennifer Thomas

Date: 2/26/2016

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