

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

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER NBU 1022-4J4BS
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE 720 929-6515
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL julie.jacobson@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU-01191	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 checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>	19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2419 FNL 1181 FEL	SENE	4	10.0 S	22.0 E	S
Top of Uppermost Producing Zone	1753 FSL 1813 FEL	NWSE	4	10.0 S	22.0 E	S
At Total Depth	1753 FSL 1813 FEL	NWSE	4	10.0 S	22.0 E	S

21. COUNTY UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet) 1224	23. NUMBER OF ACRES IN DRILLING UNIT 1042
27. ELEVATION - GROUND LEVEL 5057	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 395	26. PROPOSED DEPTH MD: 10189 TVD: 9984
	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	11	8.625	0 - 2330	28.0	J-55 LT&C	0.2	Type V	180	1.15	15.8
							Class G	270	1.15	15.8
Prod	7.875	4.5	0 - 10189	11.6	HCP-110 LT&C	12.5	Premium Lite High Strength	300	3.38	12.0
							50/50 Poz	1520	1.31	14.3

ATTACHMENTS

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

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

NAME Cara Mahler	TITLE Regulatory Analyst I	PHONE 720 929-6029
SIGNATURE	DATE 06/06/2013	EMAIL cara.mahler@anadarko.com
API NUMBER ASSIGNED 43047538510000	APPROVAL  Permit Manager	

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 1022-4J4BS**

Surface: 2419 FNL / 1181 FEL SENE
 BHL: 1753 FSL / 1813 FEL NWSE

Section 4 T10S R22E

Unitah County, Utah
 Mineral Lease: UTU-01191

ONSHORE ORDER NO. 1**DRILLING PROGRAM**

- 1. & 2.a** **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	1,064'	
Birds Nest	1,403'	Water
Mahogany	1,877'	Water
Wasatch	4,271'	Gas
Mesaverde	6,679'	Gas
Sego	8,850'	Gas
Castlegate	8,956'	Gas
Blackhawk	9,384'	Gas
TVD =	9,984'	
TD =	10,189'	

- 2.b** Kerr McGee Oil & Gas Onshore LP (Kerr McGee) may elect to drill to (i) the Blackhawk formation (part of the Mesaverde Group), (ii) to a shallower depth within the Mesaverde Group, or (iii) to the Wasatch Formation. If Kerr McGee drills to the Blackhawk formation, please refer to Blackhawk as the bottom formation. The attached Blackhawk Drilling Program includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the deeper formation.

If Kerr-McGee drills to a shallower depth in the Mesaverde Group or to the Wasatch Formation, please refer to the attached Wasatch/Mesaverde Drilling Program which includes Total Vertical Depth, Total Depth, and appropriate casing and cement programs for the shallower formations.

3. Pressure Control Equipment

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

4. Proposed Casing & Cementing Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

5. Drilling Fluids Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

6. Evaluation Program:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program

7. Abnormal Conditions:**7.a Blackhawk (Part of Mesaverde Group)**

Maximum anticipated bottom hole pressure calculated at 9984' TVD, approximately equals
6,390 psi (0.64 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 4,179 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))

7.b Wasach Formation/Mesaverde Group

Maximum anticipated bottom hole pressure calculated at 8850' TVD, approximately equals
5,399 psi (0.61 psi/ft = actual bottomhole gradient)

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

Maximum anticipated surface pressure equals approximately 3,475 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 Standard Operating Practices on file with the BLM Vernal Field Office.

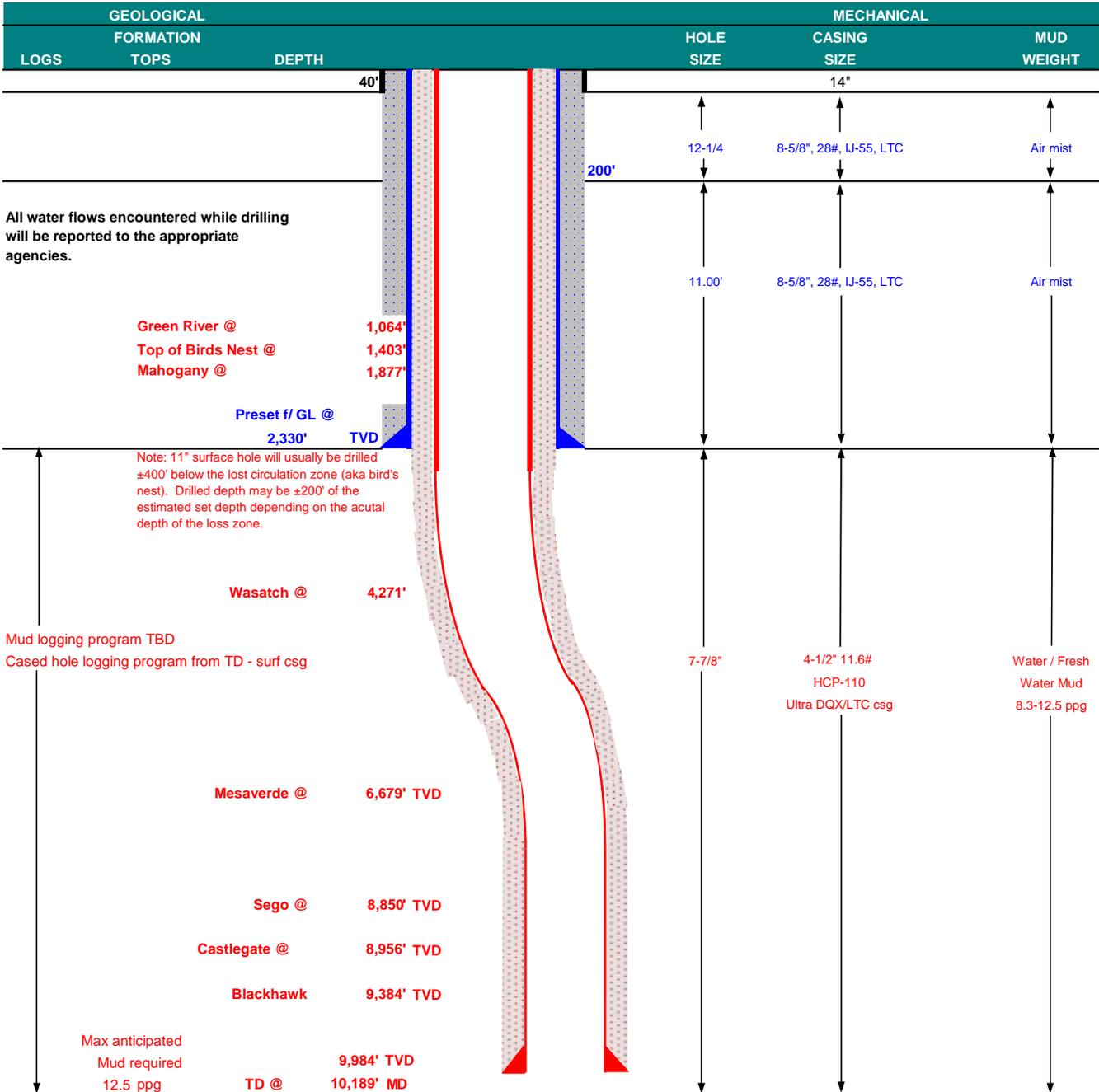
10. Other Information:

Please refer to the attached Blackhawk Drilling Program and the Wasatch/Mesaverde Drilling Program



KERR-McGEE OIL & GAS ONSHORE LP
Blackhawk Drilling Program

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	April 5, 2013	
WELL NAME	NBU 1022-4J4BS			TD	9,984'	TVD 10,189' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION 5,057'
SURFACE LOCATION	SENE	2419 FNL	1181 FEL	Sec 4	T 10S	R 22E
	Latitude:	39.978628	Longitude:	-109.439697	NAD 83	
BTM HOLE LOCATION	NWSE	1753 FSL	1813 FEL	Sec 4	T 10S	R 22E
	Latitude:	39.975561	Longitude:	-109.441908	NAD 83	
OBJECTIVE ZONE(S)	BLACKHAWK (Part of the Mesaverde Group)					
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.					





KERR-McGEE OIL & GAS ONSHORE LP
Blackhawk Drilling Program

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
								TENSION	
CONDUCTOR	14"	0-40'							
SURFACE	8-5/8"	0 to 2,330	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						2.31	1.72	6.09	N/A
PRODUCTION	4-1/2"	0 to 5,000	11.60	HCP-110	DQX	10,690	8,650	279,000	367,174
						1.19	1.33		3.84
	4-1/2"	5,000 to 10,189'	11.60	HCP-110	LTC	1.19	1.33	5.73	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	1,830'	Premium cmt + 16% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOC + GR 3 pps	220	35%	12.00	2.86
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,769'	Premium Lite II + 0.25 pps celloflake + .4% FL-52 + .3% R-3 + 5 lbs/sk Kol-Seal + 6%Bentonite II + 1.2% Sodium Metasilicate + .05 lbs/sk Static Free	300	35%	12.00	3.38
	TAIL	6,420'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free + 1.2% Sodium Metasilicate + .5 % EC-1 + .002 gps FP-6L + 2% Bentonite II	1,520	35%	14.30	1.31

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

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

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

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

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

IF extreme mud losses are observed OR cement doesn't reach surface on a well on the pad, a DV Tool may be used. With Cement Baskets above and Below it.

DRILLING ENGINEER:

Nick Spence / John Tuckwiller / Brian Cocchiere / Tyler Elliott

DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

DATE:



KERR-McGEE OIL & GAS ONSHORE LP
Wasatch/Mesaverde Drilling Program

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						BURST	COLLAPSE	LTC	DQX
								TENSION	
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SURFACE	8-5/8"	0 to 2,330	28.00	IJ-55	LTC	3,390	1,880	348,000	N/A
						7,780	6,350	6.09	N/A
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	1.15		267,035
						7,780	6,350	223,000	3.11
	4-1/2"	5,000 to 9,055'	11.60	I-80	LTC	1.11	1.15	5.81	

Surface Casing:

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	TAIL	5,290'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free + 1.2% Sodium Metasilicate + .5 % EC-1 +.002 gps FP-6L + 2% Bentonite II	1,250	35%	14.30	1.31

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DRILLING ENGINEER:

Nick Spence / John Tuckwiller / Brian Cocchiere / Tyler Elliott

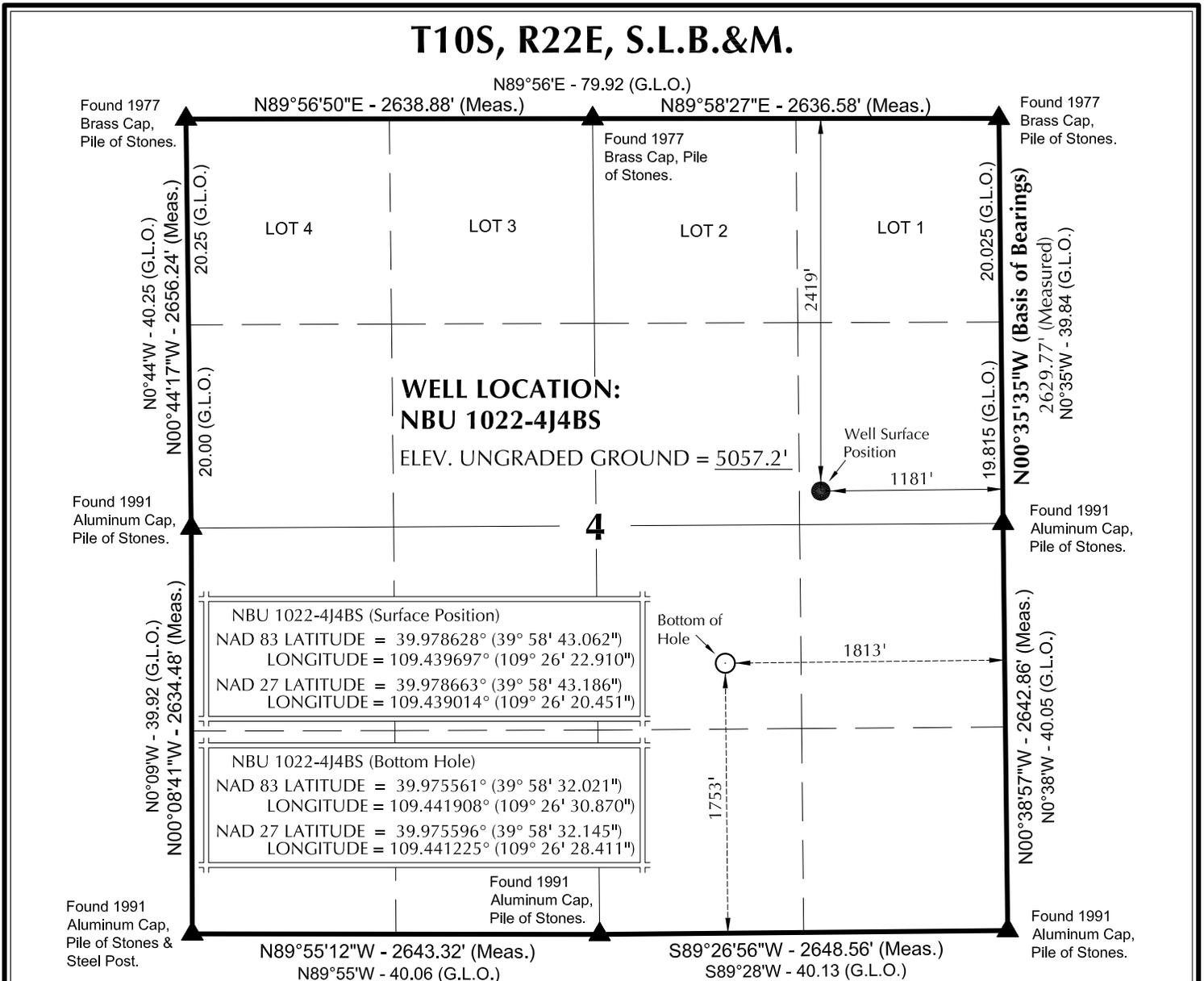
DATE:

DRILLING SUPERINTENDENT:

Kenny Gathings / Lovel Young

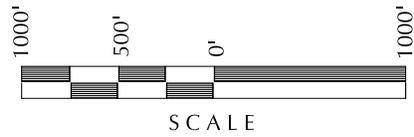
DATE:

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



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 S29°00'01"W 1277.94' 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'.



SURVEYOR'S CERTIFICATE

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

John R. Haugh
 PROFESSIONAL LAND SURVEYOR
 REGISTRATION NO. 6028691
 STATE OF UTAH

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

WELL PAD: NBU 1022-4H

NBU 1022-4J4BS
WELL PLAT
1753' FSL, 1813' FEL (Bottom Hole)
NW 1/4 SE 1/4 OF SECTION 4, T10S, R22E, S.L.B.&M., UTAH COUNTY, UTAH.

609

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

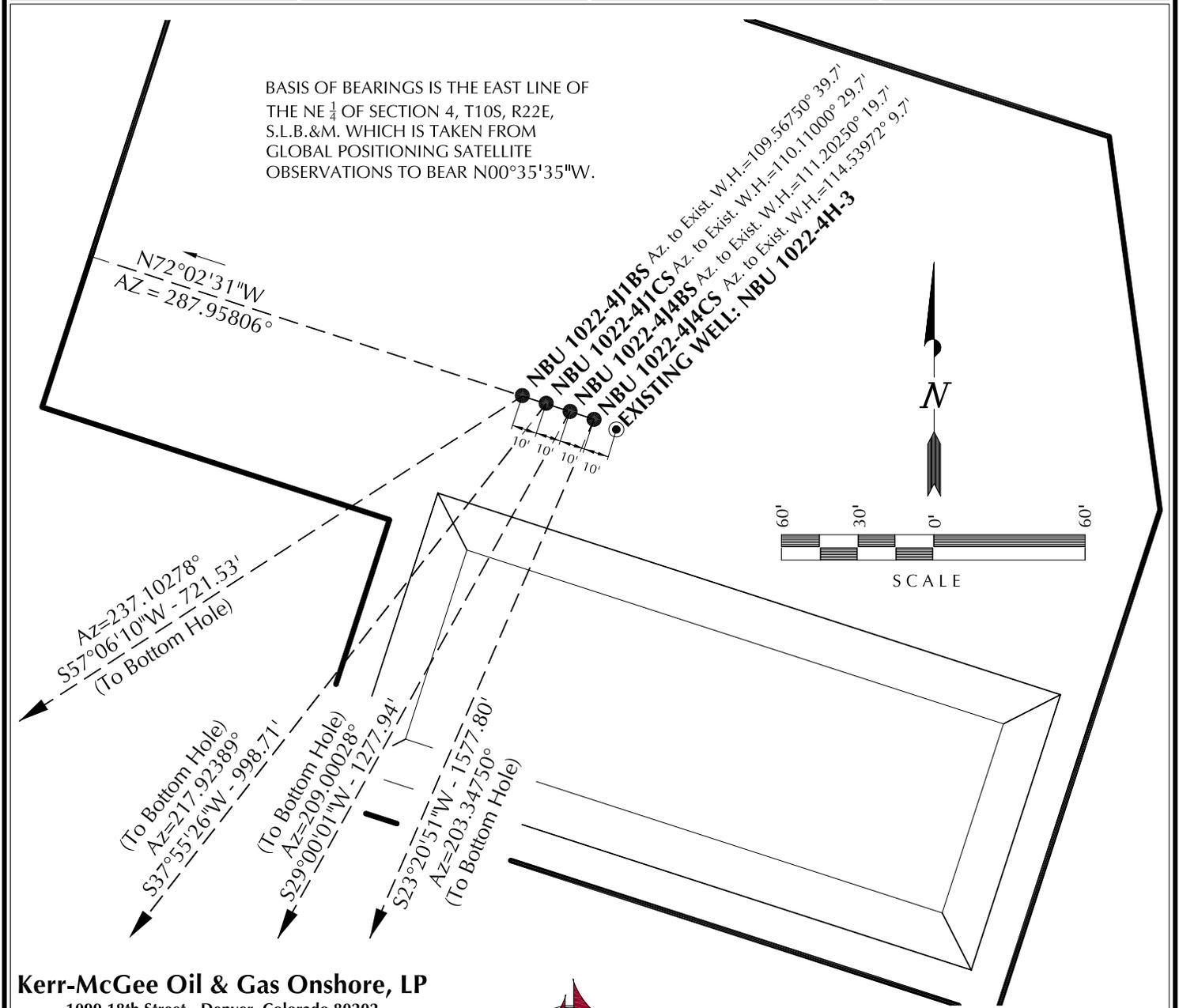
TIMBERLINE (435) 789-1365
 ENGINEERING & LAND SURVEYING, INC.
 209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 8-23-12	SURVEYED BY: J.W.	SHEET NO: 2
DATE DRAWN: 8-23-12	DRAWN BY: T.J.R.	
SCALE: 1" = 1000'		2 OF 16

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 1022-4J4CS	39°58'43.031"	109°26'22.788"	39°58'43.156"	109°26'20.328"	2422' FNL 1172' FEL	39°58'28.721"	109°26'30.823"	39°58'28.845"	109°26'28.363"	1419' FSL 1813' FEL
NBU 1022-4J4BS	39°58'43.062"	109°26'22.910"	39°58'43.186"	109°26'20.451"	2419' FNL 1181' FEL	39°58'32.021"	109°26'30.870"	39°58'32.145"	109°26'28.411"	1753' FSL 1813' FEL
NBU 1022-4J1CS	39°58'43.092"	109°26'23.032"	39°58'43.217"	109°26'20.573"	2416' FNL 1190' FEL	39°58'35.310"	109°26'30.918"	39°58'35.435"	109°26'28.458"	2086' FSL 1813' FEL
NBU 1022-4J1BS	39°58'43.123"	109°26'23.154"	39°58'43.247"	109°26'20.695"	2412' FNL 1200' FEL	39°58'39.253"	109°26'30.936"	39°58'39.377"	109°26'28.476"	2485' FSL 1810' FEL
NBU 1022-4H-3	39°58'42.992"	109°26'22.674"	39°58'43.116"	109°26'20.215"	2426' FNL 1163' FEL					

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
NBU 1022-4J4CS	-1448.6'	-625.3'	NBU 1022-4J4BS	-1117.7'	-619.6'	NBU 1022-4J1CS	-787.8'	-613.8'	NBU 1022-4J1BS	-391.9'	-605.8'



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

WELL PAD - NBU 1022-4H

WELL PAD INTERFERENCE PLAT
WELLS - NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
LOCATED IN SECTION 4, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.



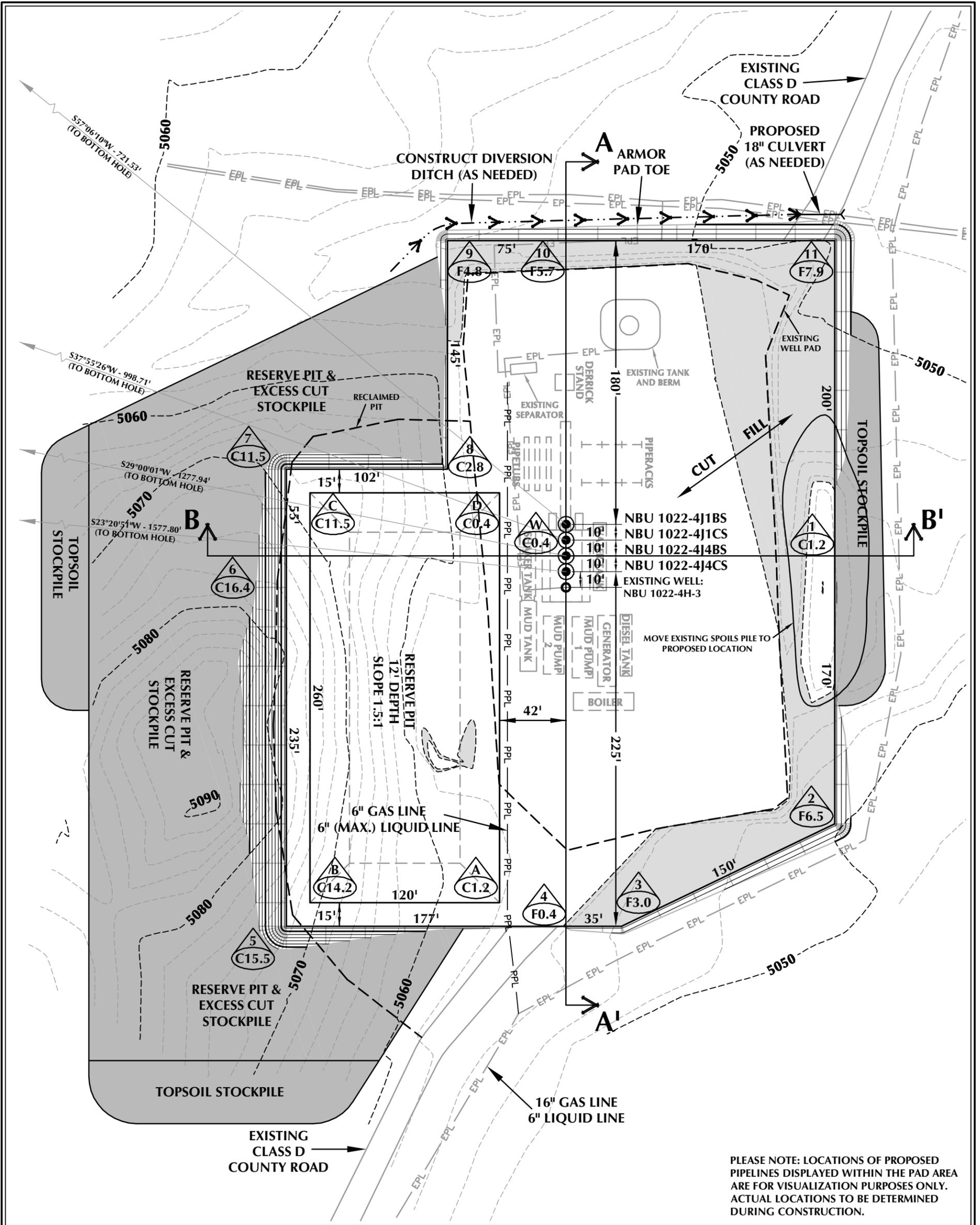
CONSULTING, LLC
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Fax 307-674-0182

TIMBERLINE

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

(435) 789-1365

DATE SURVEYED: 8-23-12	SURVEYED BY: J.W.	SHEET NO: 5
DATE DRAWN: 8-23-12	DRAWN BY: T.J.R.	
SCALE: 1" = 60'	Date Last Revised:	5 OF 16



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

WELL PAD - NBU 1022-4H DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5057.2'
 FINISHED GRADE ELEVATION = 5056.8'
 CUT SLOPES = 1:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.37 ACRES
 TOTAL DISTURBANCE AREA = 5.25 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD - NBU 1022-4H

WELL PAD - LOCATION LAYOUT
 NBU 1022-4J4CS, NBU 1022-4J4BS,
 NBU 1022-4J1CS & NBU 1022-4J1BS
 LOCATED IN SECTION 4, T10S, R22E,
 S.L.B.&M., UTAH COUNTY, UTAH

WELL PAD QUANTITIES
 TOTAL CUT FOR WELL PAD = 13,395 C.Y.
 TOTAL FILL FOR WELL PAD = 4,498 C.Y.
 TOPSOIL @ 6" DEPTH = 1,504 C.Y.
 EXCESS MATERIAL = 8,897 C.Y.

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



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 Sheridan, WY 82801
 Phone 307-674-0609
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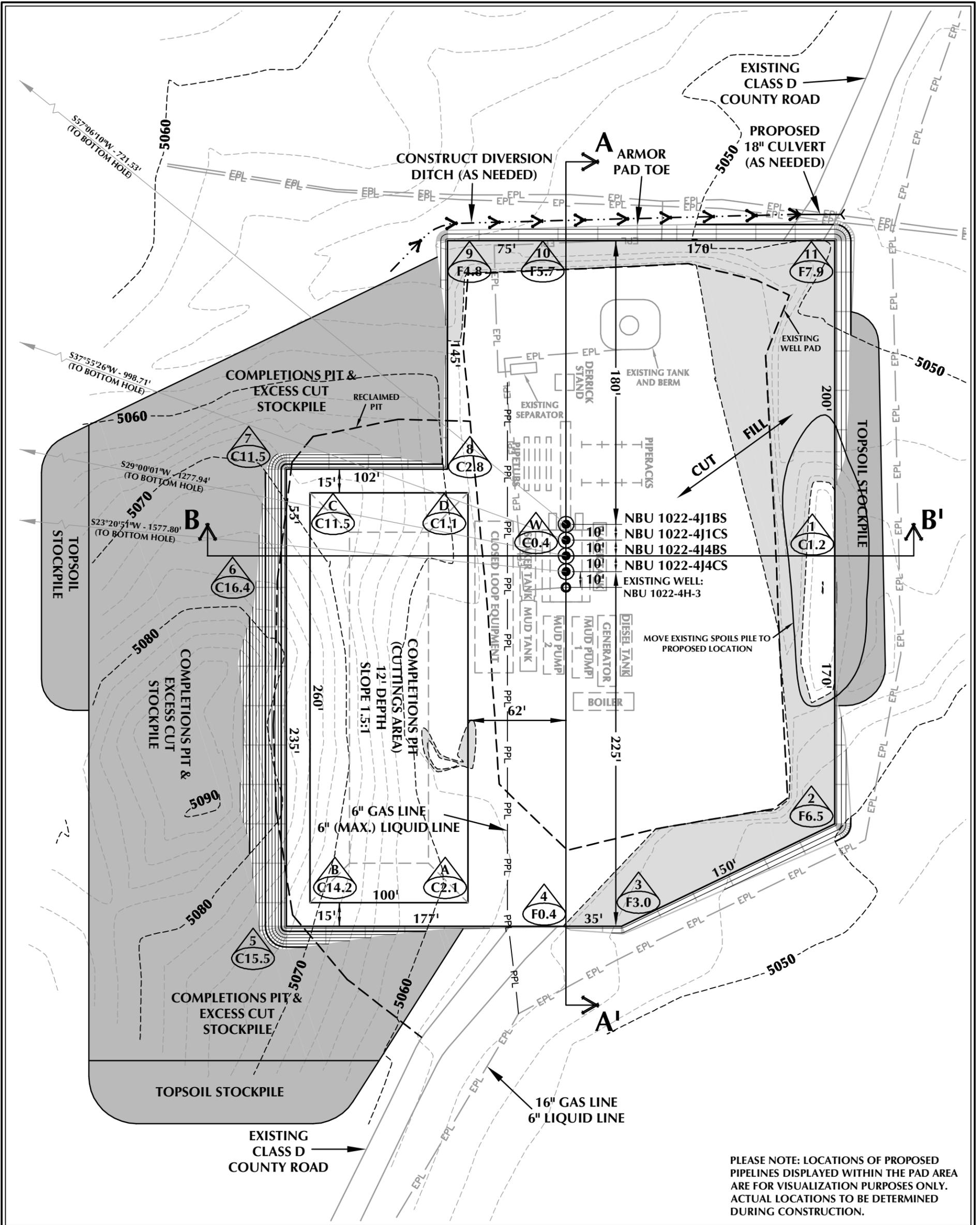
TIMBERLINE
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- WELL PAD LEGEND**
- EXISTING WELL LOCATION
 - PROPOSED WELL LOCATION
 - PROPOSED BOTTOM HOLE LOCATION
 - EXISTING CONTOURS (2' INTERVAL)
 - PROPOSED CONTOURS (2' INTERVAL)
 - PPL - PROPOSED PIPELINE
 - EPL - EXISTING PIPELINE



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

SCALE: 1"=60' DATE: 8/30/12 SHEET NO:
 REVISED: ANK 1/8/13 **6** 6 OF 16



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

WELL PAD - NBU 1022-4H (CLOSED LOOP) DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5057.2'
 FINISHED GRADE ELEVATION = 5056.8'
 CUT SLOPES = 1:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.37 ACRES
 TOTAL DISTURBANCE AREA = 5.25 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD QUANTITIES
 TOTAL CUT FOR WELL PAD = 13,395 C.Y.
 TOTAL FILL FOR WELL PAD = 4,498 C.Y.
 TOPSOIL @ 6" DEPTH = 1,504 C.Y.
 EXCESS MATERIAL = 8,897 C.Y.

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

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



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

WELL PAD - NBU 1022-4H

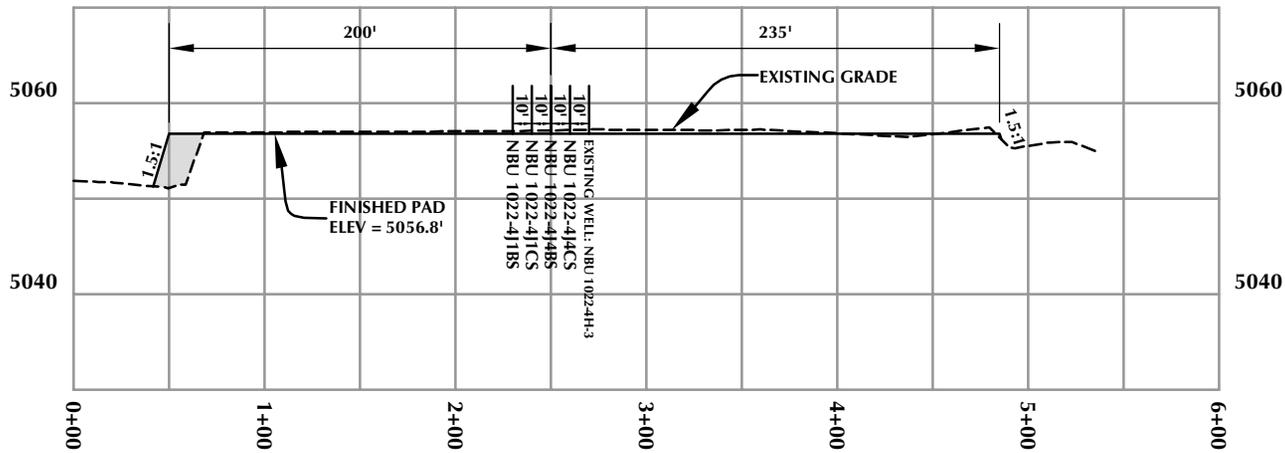
WELL PAD - LOCATION LAYOUT
 NBU 1022-4J4CS, NBU 1022-4J4BS,
 NBU 1022-4J1CS & NBU 1022-4J1BS
 LOCATED IN SECTION 4, T10S, R22E,
 S.L.B.&M., UTAH COUNTY, UTAH



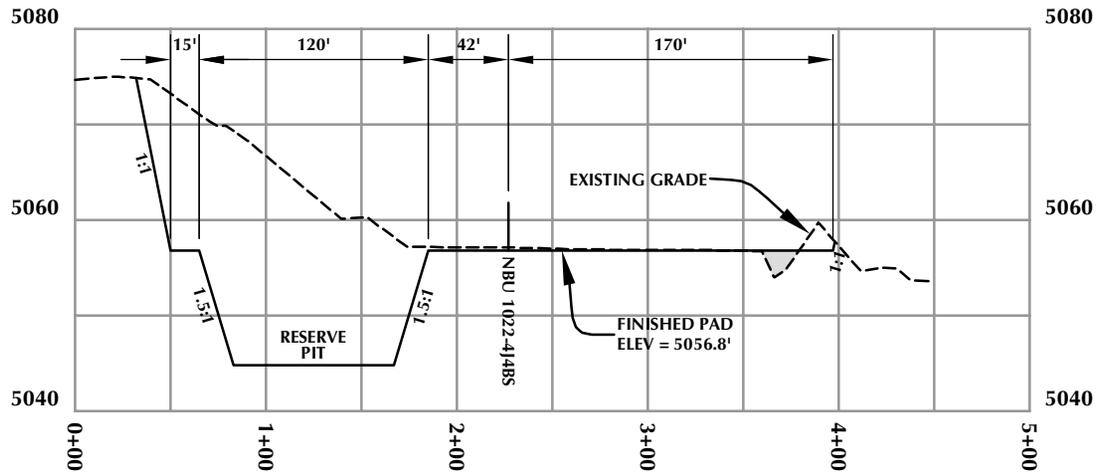
CONSULTING, LLC
 2155 North Main Street
 Sheridan, WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

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

SCALE: 1"=60' DATE: 1/8/13 SHEET NO:
 REVISED: **6B** 6B OF 16



CROSS SECTION A-A'



CROSS SECTION B-B'

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WELL PAD - NBU 1022-4H

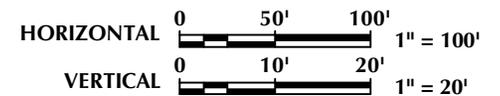
WELL PAD - CROSS SECTIONS
NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
LOCATED IN SECTION 4, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



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Sheridan, WY 82801
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TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365



Scale: 1"=100'

Date: 8/30/12

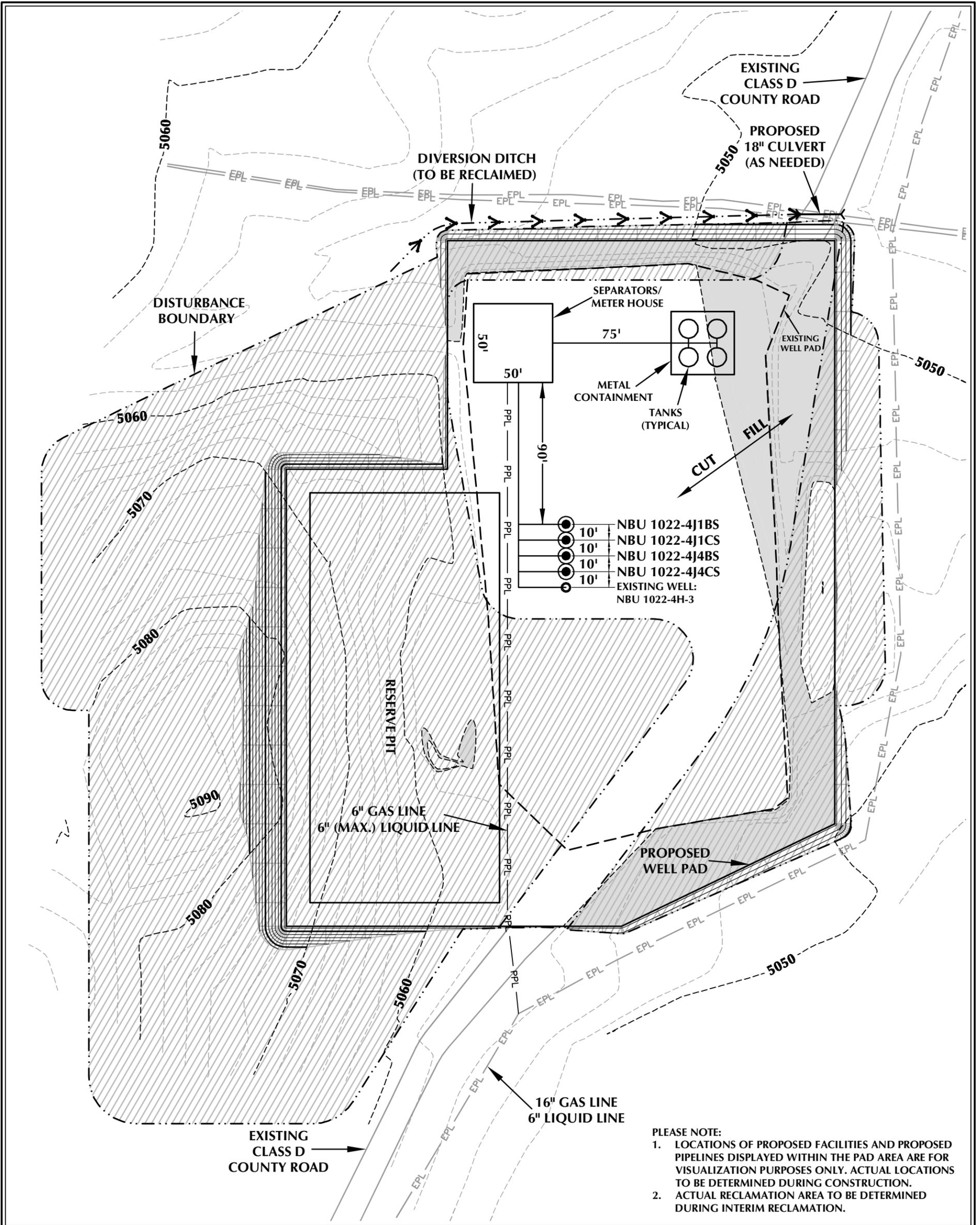
SHEET NO:

REVISED:

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7 OF 16

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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 - NBU 1022-4H RECLAMATION DESIGN SUMMARY

TOTAL DISTURBANCE AREA = 5.25 ACRES (INCLUDING EXISTING)
 RECLAMATION AREA = 3.95 ACRES
 TOTAL WELL PAD AREA AFTER RECLAMATION = 1.30 ACRES

WELL PAD LEGEND

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



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

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

WELL PAD - NBU 1022-4H

WELL PAD - RECLAMATION LAYOUT
 NBU 1022-4J4CS, NBU 1022-4J4BS,
 NBU 1022-4J1CS & NBU 1022-4J1BS
 LOCATED IN SECTION 4, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH



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 209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

SCALE: 1"=60' DATE: 8/30/12 SHEET NO:
 REVISED: ANK 1/8/13 **8** 8 OF 16

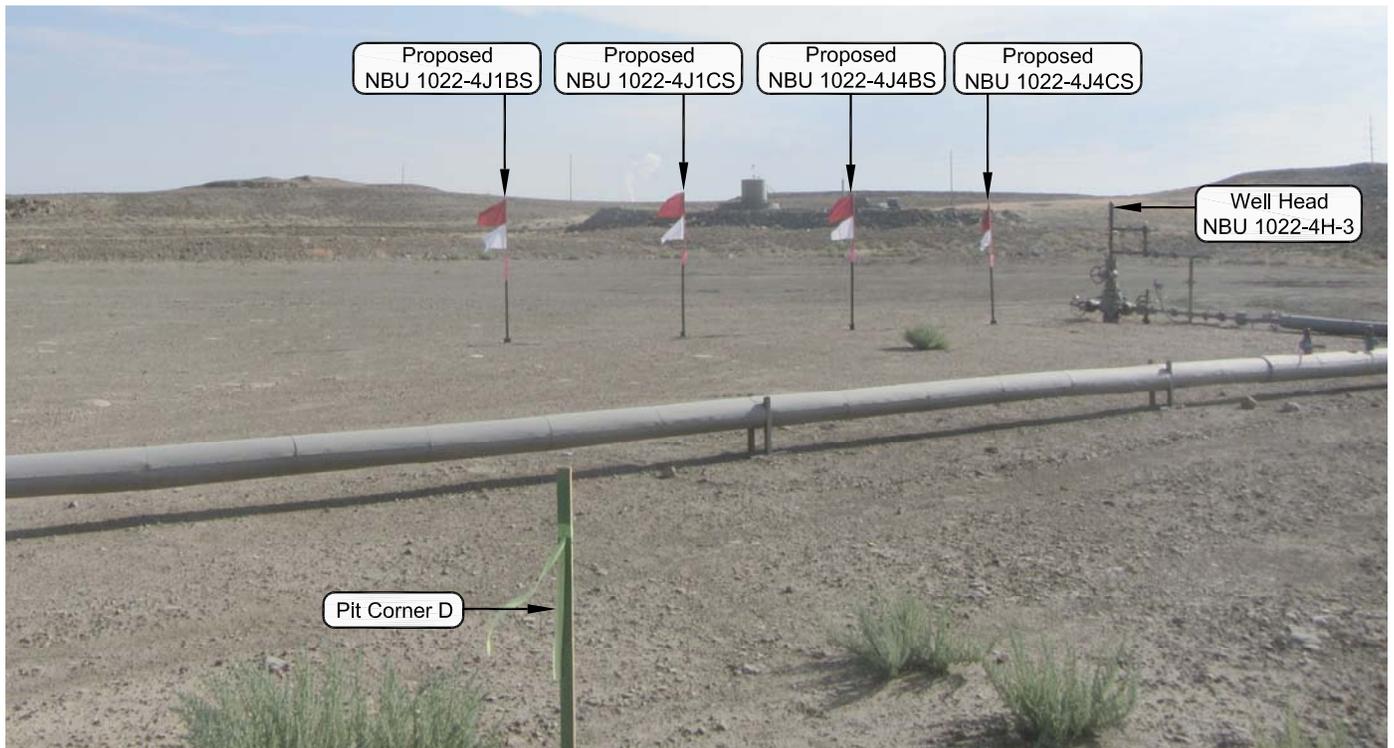


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: NORTHWESTERLY

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

WELL PAD - NBU 1022-4H

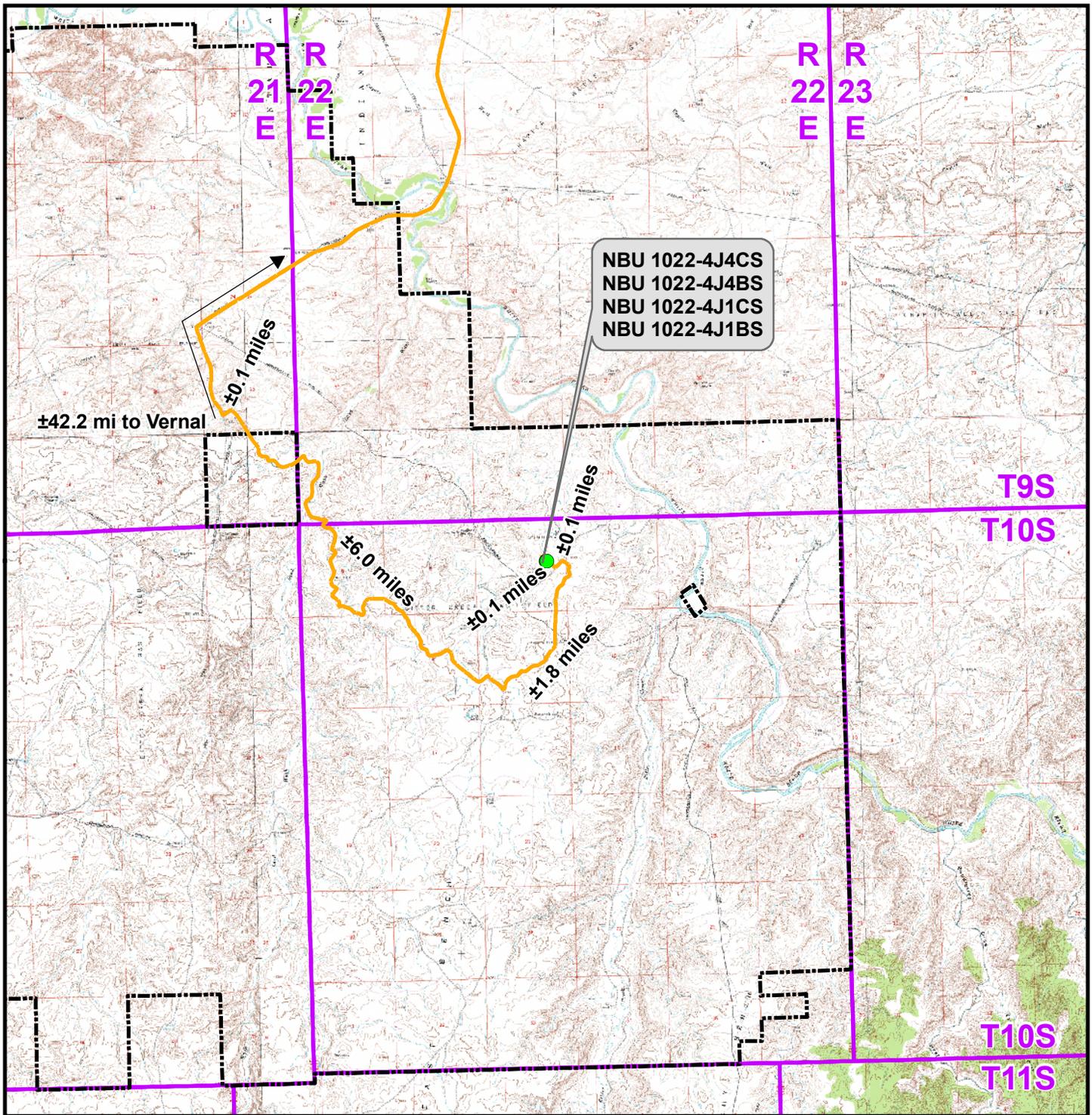
LOCATION PHOTOS
 NBU 1022-4J4CS, NBU 1022-4J4BS,
 NBU 1022-4J1CS & NBU 1022-4J1BS
 LOCATED IN SECTION 4, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH.



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

DATE PHOTOS TAKEN: 8-23-12	PHOTOS TAKEN BY: J.W.	SHEET NO: 9 9 OF 16
DATE DRAWN: 8-23-12	DRAWN BY: T.J.R.	
Date Last Revised:		



File: K:\ANADARKO\2012\2012_52_NBU_1022-4_FOCUS\GIS\Maps_ABC\NBU_1022-4H\NBU_1022-4H_A.mxd, 8/30/2012 12:07:19 PM

Legend

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

Distance From Well Pad - NBU 1022-4H To Unit Boundary: ±7,705ft

WELL PAD - NBU 1022-4H

TOPO A
 NBU 1022-4J4CS, NBU 1022-4J4BS,
 NBU 1022-4J1CS & NBU 1022-4J1BS
 LOCATED IN SECTION 4, T10S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH

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

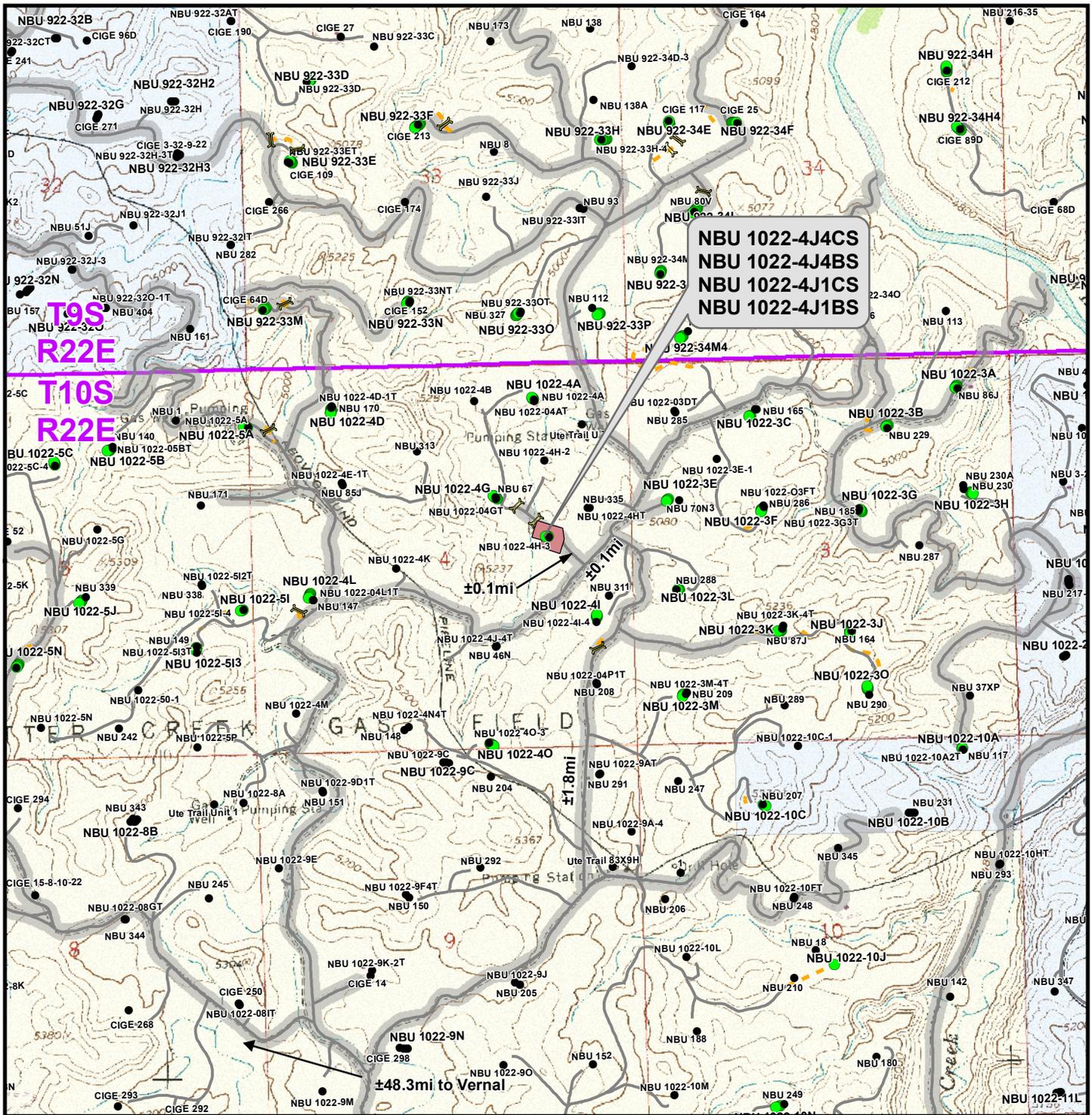
1099 18th Street
 Denver, Colorado 80202



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



SCALE: 1:100,000	NAD83 USP Central	SHEET NO:
DRAWN: TL	DATE: 30 Aug 2012	10
REVISED:	DATE:	



**NBU 1022-4J4CS
NBU 1022-4J4BS
NBU 1022-4J1CS
NBU 1022-4J1BS**

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Legend

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

Total Proposed Road Length: ±0ft

WELL PAD - NBU 1022-4H

TOPO B
NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
LOCATED IN SECTION 4, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH

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

1099 18th Street
Denver, Colorado 80202

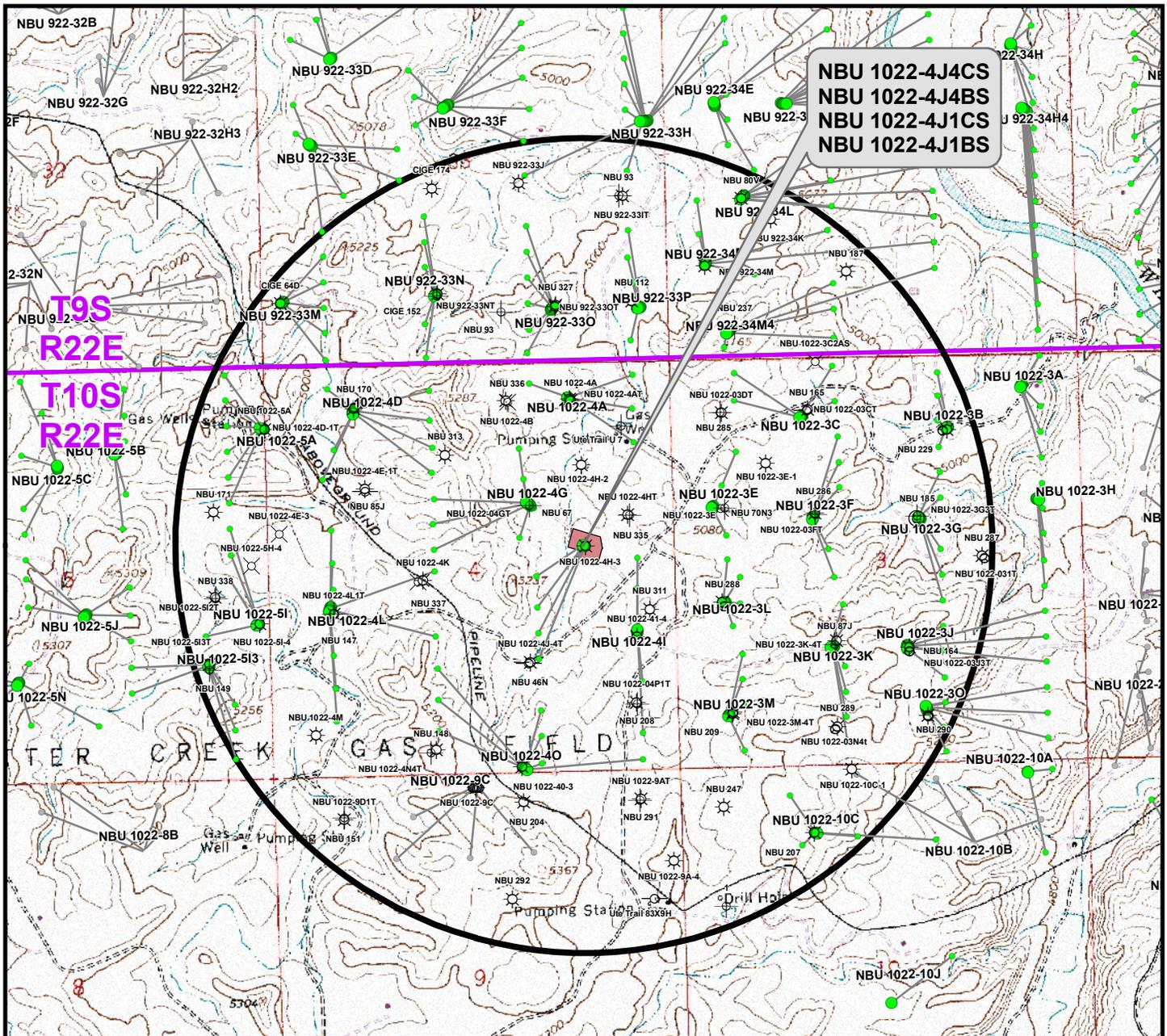


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2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182



SCALE: 1" = 2,000ft	NAD83 USP Central	SHEET NO:	11
DRAWN: TL	DATE: 30 Aug 2012	11 11 OF 16	
REVISED: TL	DATE: 11 Jan 2013		



**NBU 1022-4J4CS
NBU 1022-4J4BS
NBU 1022-4J1CS
NBU 1022-4J1BS**

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
NBU 1022-4J4CS	NBU 1022-4J-4T	127ft
NBU 1022-4J4BS	NBU 1022-4J-4T	395ft
NBU 1022-4J1CS	NBU 1022-4J-4T	719ft
NBU 1022-4J1BS	NBU 1022-4H-3	747ft

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 - NBU 1022-4H

TOPO C
NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
LOCATED IN SECTION 4, T10S, R22E,
S.L.B.&M., Uintah County, Utah

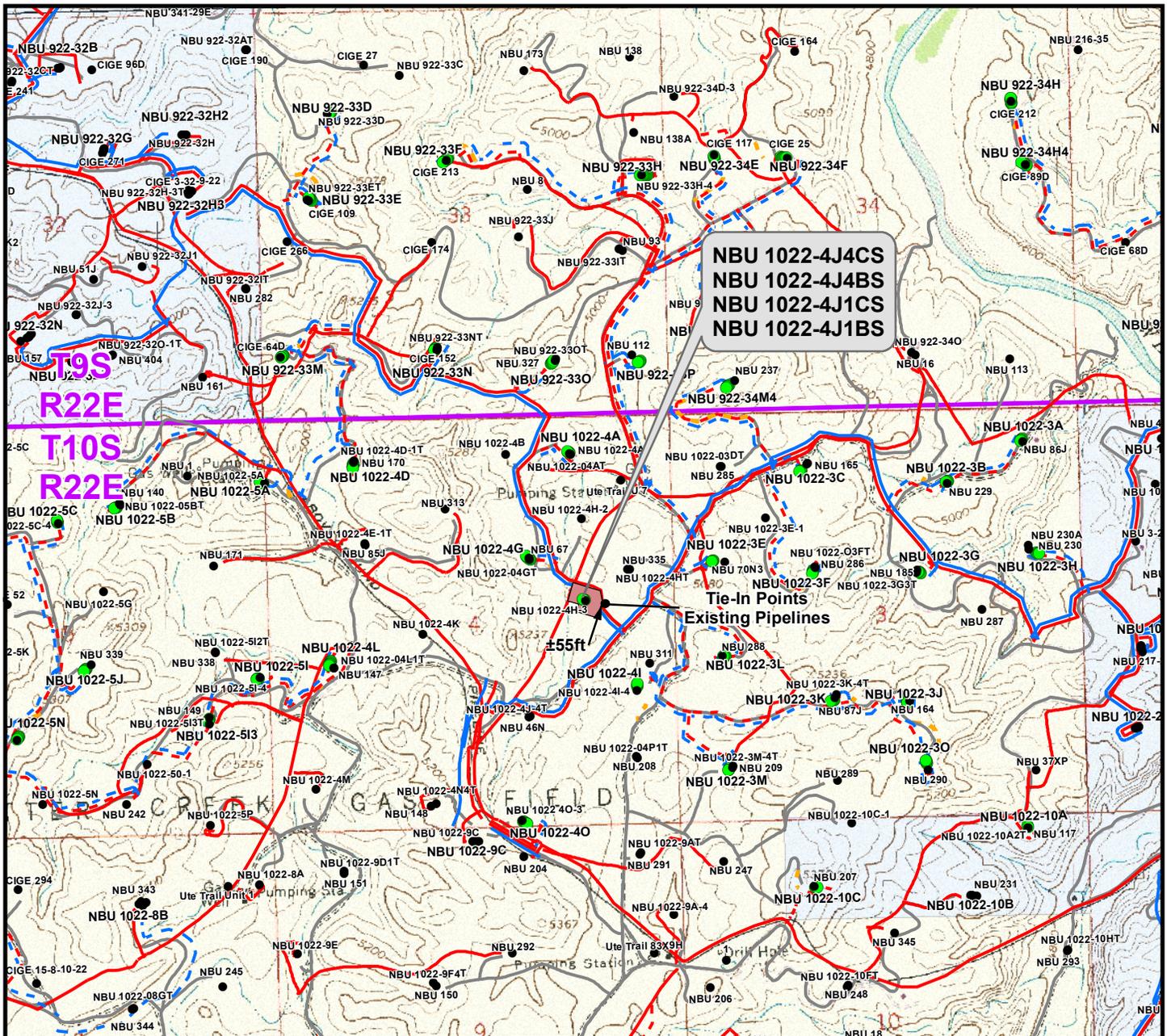
Kerr-McGee Oil & Gas Onshore L.P.
 1099 18th Street
 Denver, Colorado 80202



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

SCALE: 1" = 2,000ft	NAD83 USP Central	12
DRAWN: TL	DATE: 11 Jan 2013	
REVISED:	DATE:	

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Proposed Liquid Pipeline	Length
Buried 6" (Max.) (Separator to Edge of Pad)	±345ft
Buried 6" (Max.) (Edge of Pad to Existing 6" Liquid Pipeline)	±55ft
TOTAL PROPOSED BURIED LIQUID PIPELINE =	±400ft

Proposed Gas Pipeline	Length
Buried 6" (Meter House to Edge of Pad)	±345ft
Buried 6" (Edge of Pad to Existing 16" Gas Pipeline)	±55ft
TOTAL PROPOSED BURIED GAS PIPELINE =	±400ft

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 - NBU 1022-4H

TOPO D
NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
LOCATED IN SECTION 4, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH

Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street
Denver, Colorado 80202



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 Sheridan, Wyoming 82801
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 Fax 307-674-0182

SCALE: 1" = 2,000ft

NAD83 USP Central

SHEET NO:

DRAWN: TL

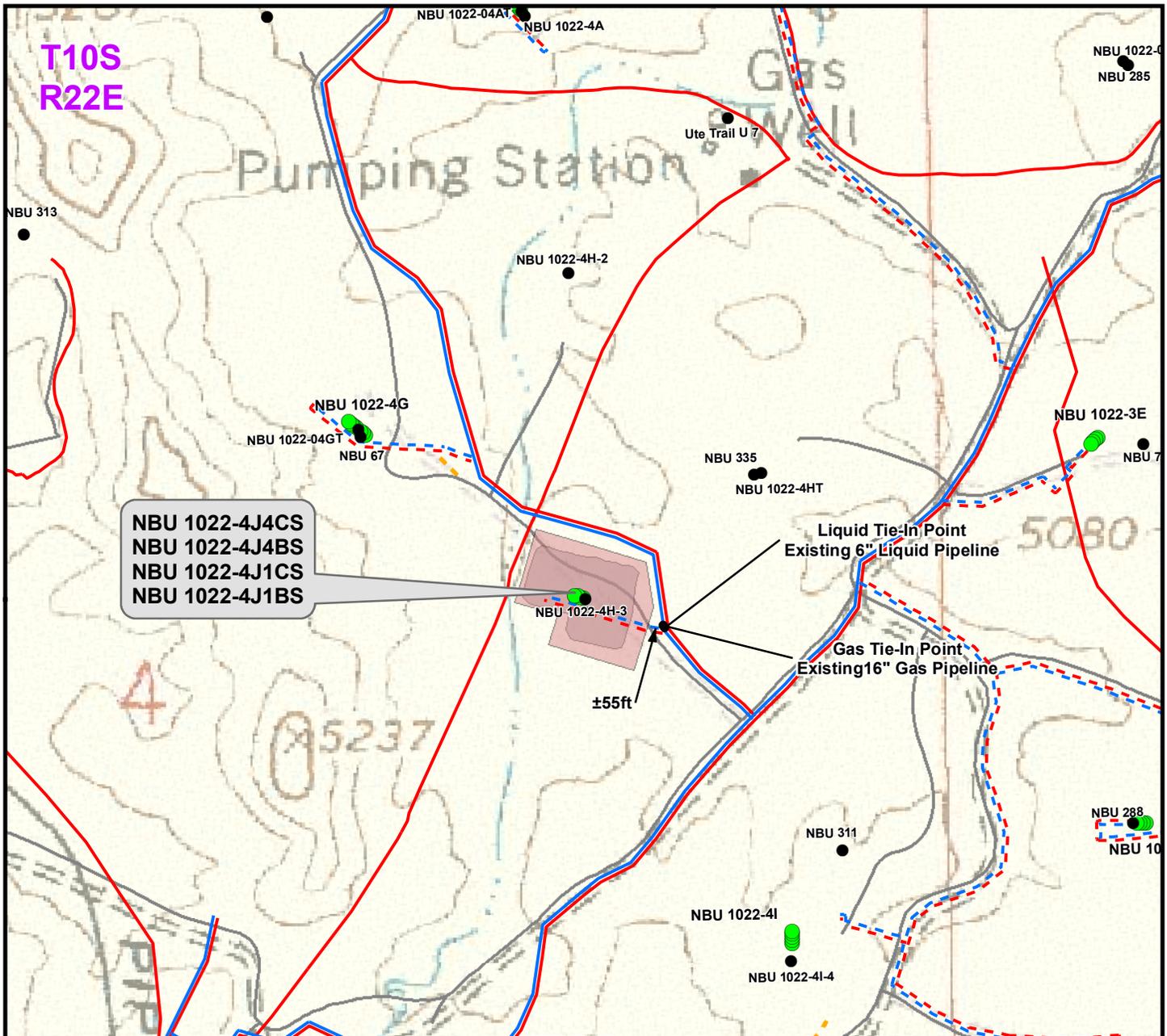
DATE: 11 Jan 2013

13

REVISED:

DATE:

13 OF 16



NBU 1022-4J4CS
 NBU 1022-4J4BS
 NBU 1022-4J1CS
 NBU 1022-4J1BS

Liquid Tie-In Point
 Existing 6" Liquid Pipeline

Gas Tie-In Point
 Existing 16" Gas Pipeline

±55ft

Proposed Liquid Pipeline	Length
Buried 6" (Max.) (Separator to Edge of Pad)	±345ft
Buried 6" (Max.) (Edge of Pad to Existing 6" Liquid Pipeline)	±55ft
TOTAL PROPOSED BURIED LIQUID PIPELINE =	±400ft

Proposed Gas Pipeline	Length
Buried 6" (Meter House to Edge of Pad)	±345ft
Buried 6" (Edge of Pad to Existing 16" Gas Pipeline)	±55ft
TOTAL PROPOSED BURIED GAS PIPELINE =	±400ft

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 - NBU 1022-4H

TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 1022-4J4CS, NBU 1022-4J4BS,
 NBU 1022-4J1CS & NBU 1022-4J1BS
 LOCATED IN SECTION 4, T10S, R22E,
 S.L.B.&M., Uintah County, Utah

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

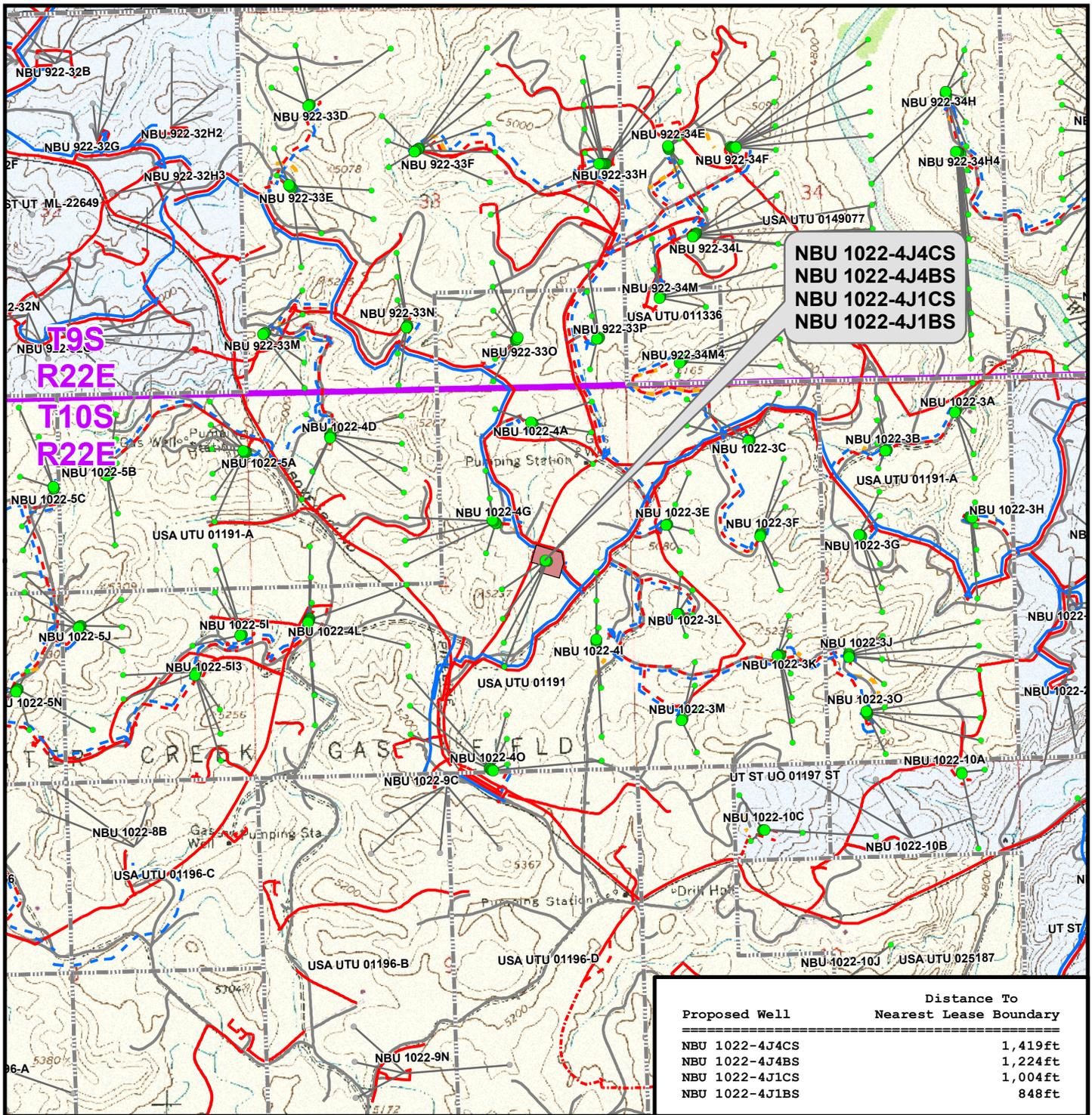
1099 18th Street
 Denver, Colorado 80202



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

SCALE: 1" = 500ft	NAD83 USP Central	14 14 OF 16
DRAWN: TL	DATE: 30 Aug 2012	
REVISED: TL	DATE: 11 Jan 2013	

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**NBU 1022-4J4CS
NBU 1022-4J4BS
NBU 1022-4J1CS
NBU 1022-4J1BS**

Proposed Well	Distance To Nearest Lease Boundary
NBU 1022-4J4CS	1,419ft
NBU 1022-4J4BS	1,224ft
NBU 1022-4J1CS	1,004ft
NBU 1022-4J1BS	848ft

Legend

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

WELL PAD - NBU 1022-4H

TOPO E
NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
LOCATED IN SECTION 4, T10S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH

Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street
Denver, Colorado 80202

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

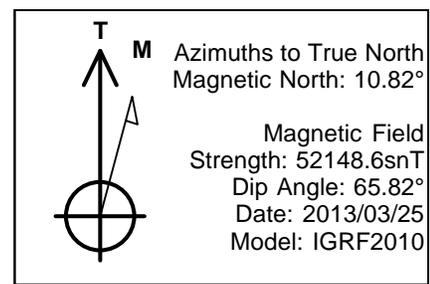
SCALE: 1" = 2,000ft	NAD83 USP Central	15 15 OF 16
DRAWN: TL	DATE: 11 Jan 2013	
REVISED:	DATE:	

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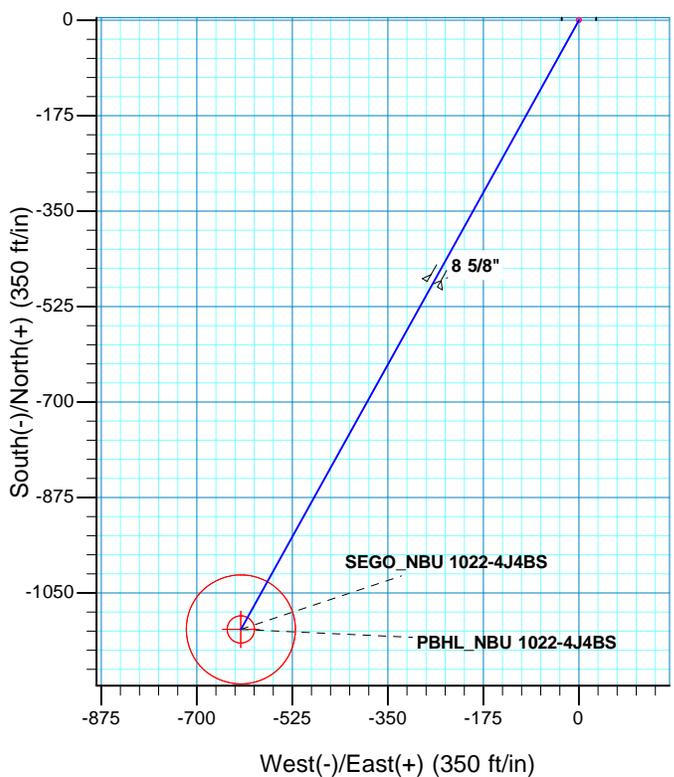
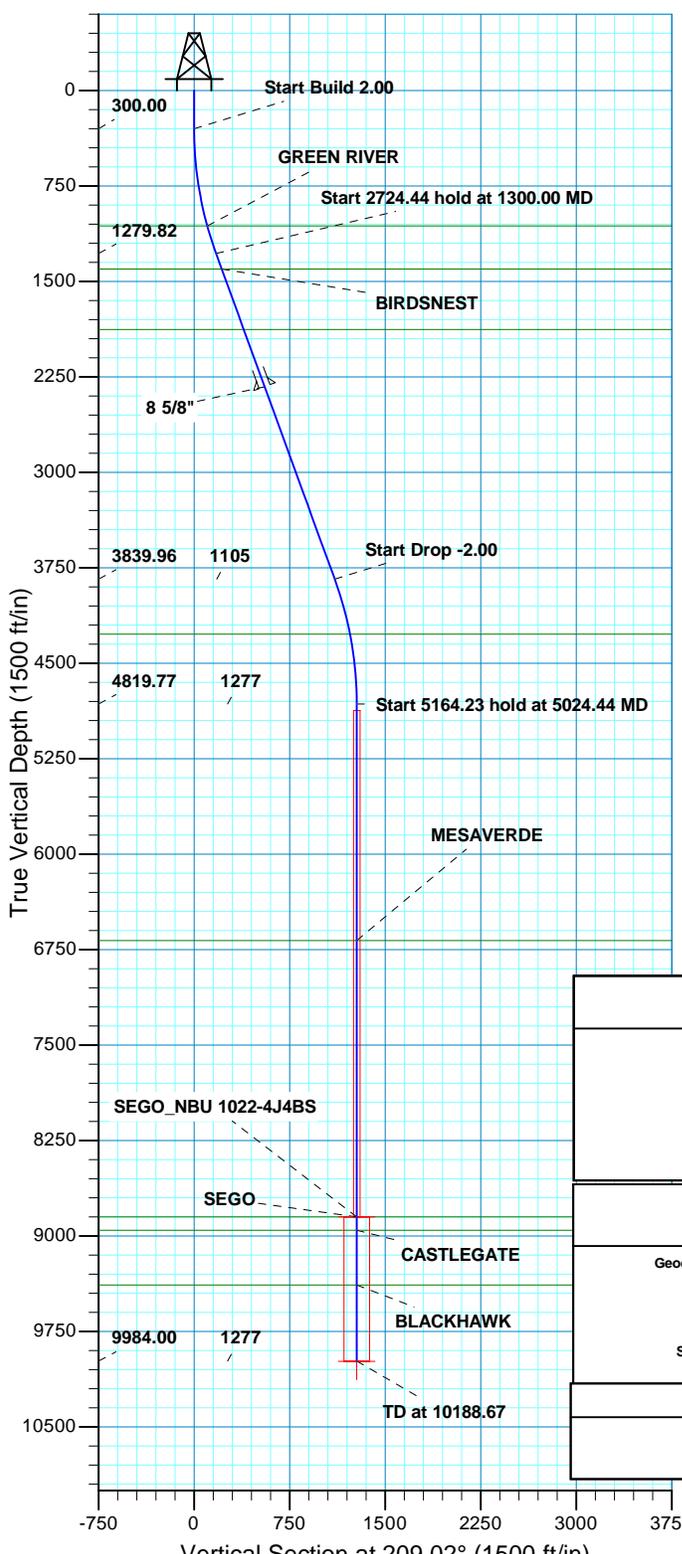
**Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 1022-4H
WELLS - NBU 1022-4J4CS, NBU 1022-4J4BS,
NBU 1022-4J1CS & NBU 1022-4J1BS
Section 4, T10S, R22E, S.L.B.&M.**

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.7 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 0.1 miles to a second Class D County Road to the southeast. Exit right and proceed in a southeasterly direction along the second Class D County Road approximately 6.0 miles to a third Class D County Road to the northeast. Exit left and proceed in a northeasterly, then northerly direction along the third Class D County Road approximately 1.8 miles to a fourth Class D County Road to the southwest. Exit left and proceed in a southwesterly direction along the fourth Class D County Road approximately 0.1 miles to a fifth Class D County Road to the northwest. Exit right and proceed in a northwesterly direction along the fifth Class D County Road approximately 0.1 miles to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 50.3 miles in a southerly direction.



WELL DETAILS: NBU 1022-4J4BS								
GL 5057 & KB 4 @ 5061.00ft (ASSUMED)								
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
0.00	0.00	14522102.72	2077729.40	39.9786626	-109.4390138			
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SEGO	8850.00	-1117.03	-619.57	14520975.01	2077129.49	39.9755956	-109.4412248	Circle (Radius: 25.00)
- plan hits target center								
PBHL	9984.00	-1117.03	-619.57	14520975.01	2077129.49	39.9755956	-109.4412248	Circle (Radius: 100.00)
- plan hits target center								



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
1300.00	20.00	209.02	1279.82	-151.08	-83.80	2.00	209.02	172.77	
4024.44	20.00	209.02	3839.96	-965.95	-535.77	0.00	0.00	1104.58	
5024.44	0.00	0.00	4819.77	-1117.03	-619.57	2.00	180.00	1277.35	
10188.67	0.00	0.00	9984.00	-1117.03	-619.57	0.00	0.00	1277.35	PBHL_NBU 1022-4J4BS

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 4 T10N R22E		
System Datum: Mean Sea Level		

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1064.00	1073.36	GREEN RIVER
1403.00	1431.09	BIRDSNEST
1877.00	1935.51	MAHOGANY
4271.00	4472.26	WASATCH
6679.00	6883.67	MESAVERDE
8850.00	9054.67	SEGO
8956.00	9160.67	CASTLEGATE
9384.00	9588.67	BLACKHAWK

CASING DETAILS			
TVD	MD	Name	Size
2327.00	2414.39	8 5/8"	8.625

RECEIVED



Scientific Drilling

US ROCKIES REGION PLANNING

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

NBU 1022-4H PAD

NBU 1022-4J4BS

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

25 March, 2013





Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Site:	NBU 1022-4H PAD	North Reference:	True
Well:	NBU 1022-4J4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

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

Site	NBU 1022-4H PAD, SECTION 4 T10N R22E				
Site Position:	Northing:	14,522,108.58 usft	Latitude:	39.9786796	
From: Lat/Long	Easting:	2,077,710.24 usft	Longitude:	-109.4390818	
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.00 °

Well	NBU 1022-4J4BS, 2419 FNL 1181 FEL					
Well Position	+N/-S	-6.19 ft	Northing:	14,522,102.72 usft	Latitude:	39.9786626
	+E/-W	19.05 ft	Easting:	2,077,729.40 usft	Longitude:	-109.4390138
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,057.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2013/03/25	10.82	65.82	52,149

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	209.02

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	209.02	1,279.82	-151.08	-83.80	2.00	2.00	0.00	209.02	
4,024.44	20.00	209.02	3,839.96	-965.95	-535.77	0.00	0.00	0.00	0.00	
5,024.44	0.00	0.00	4,819.77	-1,117.03	-619.57	2.00	-2.00	0.00	180.00	
10,188.67	0.00	0.00	9,984.00	-1,117.03	-619.57	0.00	0.00	0.00	0.00	PBHL_NBU 1022-4J4



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Site:	NBU 1022-4H PAD	North Reference:	True
Well:	NBU 1022-4J4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
400.00	2.00	209.02	399.98	-1.53	-0.85	1.75	2.00	2.00	0.00	
500.00	4.00	209.02	499.84	-6.10	-3.38	6.98	2.00	2.00	0.00	
600.00	6.00	209.02	599.45	-13.72	-7.61	15.69	2.00	2.00	0.00	
700.00	8.00	209.02	698.70	-24.38	-13.52	27.88	2.00	2.00	0.00	
800.00	10.00	209.02	797.47	-38.06	-21.11	43.52	2.00	2.00	0.00	
900.00	12.00	209.02	895.62	-54.75	-30.36	62.60	2.00	2.00	0.00	
1,000.00	14.00	209.02	993.06	-74.42	-41.28	85.10	2.00	2.00	0.00	
1,073.36	15.47	209.02	1,064.00	-90.73	-50.32	103.75	2.00	2.00	0.00	
GREEN RIVER										
1,100.00	16.00	209.02	1,089.64	-97.05	-53.83	110.98	2.00	2.00	0.00	
1,200.00	18.00	209.02	1,185.27	-122.61	-68.01	140.21	2.00	2.00	0.00	
1,300.00	20.00	209.02	1,279.82	-151.08	-83.80	172.77	2.00	2.00	0.00	
Start 2724.44 hold at 1300.00 MD										
1,400.00	20.00	209.02	1,373.78	-180.99	-100.39	206.97	0.00	0.00	0.00	
1,431.09	20.00	209.02	1,403.00	-190.29	-105.55	217.60	0.00	0.00	0.00	
BIRDSNEST										
1,500.00	20.00	209.02	1,467.75	-210.90	-116.98	241.17	0.00	0.00	0.00	
1,600.00	20.00	209.02	1,561.72	-240.81	-133.57	275.37	0.00	0.00	0.00	
1,700.00	20.00	209.02	1,655.69	-270.72	-150.16	309.58	0.00	0.00	0.00	
1,800.00	20.00	209.02	1,749.66	-300.63	-166.75	343.78	0.00	0.00	0.00	
1,900.00	20.00	209.02	1,843.63	-330.54	-183.34	377.98	0.00	0.00	0.00	
1,935.51	20.00	209.02	1,877.00	-341.16	-189.23	390.13	0.00	0.00	0.00	
MAHOGANY										
2,000.00	20.00	209.02	1,937.60	-360.45	-199.93	412.18	0.00	0.00	0.00	
2,100.00	20.00	209.02	2,031.57	-390.36	-216.51	446.38	0.00	0.00	0.00	
2,200.00	20.00	209.02	2,125.54	-420.27	-233.10	480.59	0.00	0.00	0.00	
2,300.00	20.00	209.02	2,219.51	-450.18	-249.69	514.79	0.00	0.00	0.00	
2,400.00	20.00	209.02	2,313.48	-480.09	-266.28	548.99	0.00	0.00	0.00	
2,414.39	20.00	209.02	2,327.00	-484.39	-268.67	553.91	0.00	0.00	0.00	
8 5/8"										
2,500.00	20.00	209.02	2,407.45	-510.00	-282.87	583.19	0.00	0.00	0.00	
2,600.00	20.00	209.02	2,501.42	-539.91	-299.46	617.39	0.00	0.00	0.00	
2,700.00	20.00	209.02	2,595.39	-569.82	-316.05	651.60	0.00	0.00	0.00	
2,800.00	20.00	209.02	2,689.35	-599.72	-332.64	685.80	0.00	0.00	0.00	
2,900.00	20.00	209.02	2,783.32	-629.63	-349.23	720.00	0.00	0.00	0.00	
3,000.00	20.00	209.02	2,877.29	-659.54	-365.82	754.20	0.00	0.00	0.00	
3,100.00	20.00	209.02	2,971.26	-689.45	-382.41	788.40	0.00	0.00	0.00	
3,200.00	20.00	209.02	3,065.23	-719.36	-399.00	822.61	0.00	0.00	0.00	
3,300.00	20.00	209.02	3,159.20	-749.27	-415.59	856.81	0.00	0.00	0.00	
3,400.00	20.00	209.02	3,253.17	-779.18	-432.18	891.01	0.00	0.00	0.00	
3,500.00	20.00	209.02	3,347.14	-809.09	-448.77	925.21	0.00	0.00	0.00	
3,600.00	20.00	209.02	3,441.11	-839.00	-465.36	959.41	0.00	0.00	0.00	
3,700.00	20.00	209.02	3,535.08	-868.91	-481.94	993.62	0.00	0.00	0.00	
3,800.00	20.00	209.02	3,629.05	-898.82	-498.53	1,027.82	0.00	0.00	0.00	
3,900.00	20.00	209.02	3,723.02	-928.73	-515.12	1,062.02	0.00	0.00	0.00	
4,000.00	20.00	209.02	3,816.99	-958.64	-531.71	1,096.22	0.00	0.00	0.00	
4,024.44	20.00	209.02	3,839.96	-965.95	-535.77	1,104.58	0.00	0.00	0.00	
Start Drop -2.00										



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Site:	NBU 1022-4H PAD	North Reference:	True
Well:	NBU 1022-4J4BS	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	18.49	209.02	3,911.29	-987.72	-547.85	1,129.49	2.00	-2.00	0.00
4,200.00	16.49	209.02	4,006.66	-1,014.00	-562.42	1,159.54	2.00	-2.00	0.00
4,300.00	14.49	209.02	4,103.02	-1,037.36	-575.38	1,186.24	2.00	-2.00	0.00
4,400.00	12.49	209.02	4,200.26	-1,057.75	-586.69	1,209.56	2.00	-2.00	0.00
4,472.26	11.04	209.02	4,271.00	-1,070.64	-593.84	1,224.30	2.00	-2.00	0.00
WASATCH									
4,500.00	10.49	209.02	4,298.25	-1,075.17	-596.35	1,229.48	2.00	-2.00	0.00
4,600.00	8.49	209.02	4,396.88	-1,089.59	-604.34	1,245.97	2.00	-2.00	0.00
4,700.00	6.49	209.02	4,496.02	-1,100.98	-610.67	1,259.00	2.00	-2.00	0.00
4,800.00	4.49	209.02	4,595.56	-1,109.35	-615.31	1,268.56	2.00	-2.00	0.00
4,900.00	2.49	209.02	4,695.37	-1,114.67	-618.26	1,274.65	2.00	-2.00	0.00
5,000.00	0.49	209.02	4,795.33	-1,116.94	-619.52	1,277.25	2.00	-2.00	0.00
5,024.44	0.00	0.00	4,819.77	-1,117.03	-619.57	1,277.35	2.00	-2.00	0.00
Start 5164.23 hold at 5024.44 MD									
5,100.00	0.00	0.00	4,895.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,200.00	0.00	0.00	4,995.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,300.00	0.00	0.00	5,095.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,400.00	0.00	0.00	5,195.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,500.00	0.00	0.00	5,295.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,600.00	0.00	0.00	5,395.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,700.00	0.00	0.00	5,495.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,800.00	0.00	0.00	5,595.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
5,900.00	0.00	0.00	5,695.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,000.00	0.00	0.00	5,795.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,100.00	0.00	0.00	5,895.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,200.00	0.00	0.00	5,995.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,300.00	0.00	0.00	6,095.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,400.00	0.00	0.00	6,195.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,500.00	0.00	0.00	6,295.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,600.00	0.00	0.00	6,395.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,700.00	0.00	0.00	6,495.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,800.00	0.00	0.00	6,595.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
6,883.67	0.00	0.00	6,679.00	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
MESAVERDE									
6,900.00	0.00	0.00	6,695.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,000.00	0.00	0.00	6,795.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,100.00	0.00	0.00	6,895.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,200.00	0.00	0.00	6,995.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,300.00	0.00	0.00	7,095.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,400.00	0.00	0.00	7,195.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,500.00	0.00	0.00	7,295.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,600.00	0.00	0.00	7,395.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,700.00	0.00	0.00	7,495.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,800.00	0.00	0.00	7,595.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
7,900.00	0.00	0.00	7,695.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,000.00	0.00	0.00	7,795.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,100.00	0.00	0.00	7,895.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,200.00	0.00	0.00	7,995.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,300.00	0.00	0.00	8,095.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,400.00	0.00	0.00	8,195.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,500.00	0.00	0.00	8,295.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,600.00	0.00	0.00	8,395.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,700.00	0.00	0.00	8,495.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Site:	NBU 1022-4H PAD	North Reference:	True
Well:	NBU 1022-4J4BS	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)
8,800.00	0.00	0.00	8,595.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
8,900.00	0.00	0.00	8,695.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,000.00	0.00	0.00	8,795.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,054.67	0.00	0.00	8,850.00	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
SEGO - SEGO_NBU 1022-4J4BS									
9,100.00	0.00	0.00	8,895.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,160.67	0.00	0.00	8,956.00	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
CASTLEGATE									
9,200.00	0.00	0.00	8,995.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,300.00	0.00	0.00	9,095.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,400.00	0.00	0.00	9,195.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,500.00	0.00	0.00	9,295.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,588.67	0.00	0.00	9,384.00	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
BLACKHAWK									
9,600.00	0.00	0.00	9,395.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,700.00	0.00	0.00	9,495.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,800.00	0.00	0.00	9,595.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
9,900.00	0.00	0.00	9,695.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
10,000.00	0.00	0.00	9,795.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
10,100.00	0.00	0.00	9,895.33	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
10,188.67	0.00	0.00	9,984.00	-1,117.03	-619.57	1,277.35	0.00	0.00	0.00
TD at 10188.67 - PBHL_NBU 1022-4J4BS									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SEGO_NBU 1022-4J4B - hit/miss target - Shape	0.00	0.00	8,850.00	-1,117.03	-619.57	14,520,975.02	2,077,129.49	39.9755956	-109.4412248
- plan hits target center - Circle (radius 25.00)									
PBHL_NBU 1022-4J4B - hit/miss target - Shape	0.00	0.00	9,984.00	-1,117.03	-619.57	14,520,975.02	2,077,129.49	39.9755956	-109.4412248
- plan hits target center - Circle (radius 100.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,414.39	2,327.00	8 5/8"	8.625	11.000	



Database:	EDM5000-RobertS-Local	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5057 & KB 4 @ 5061.00ft (ASSUMED)
Site:	NBU 1022-4H PAD	North Reference:	True
Well:	NBU 1022-4J4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,073.36	1,064.00	GREEN RIVER			
1,431.09	1,403.00	BIRDSNEST			
1,935.51	1,877.00	MAHOGANY			
4,472.26	4,271.00	WASATCH			
6,883.67	6,679.00	MESAVERDE			
9,054.67	8,850.00	SEGO			
9,160.67	8,956.00	CASTLEGATE			
9,588.67	9,384.00	BLACKHAWK			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
1,300.00	1,279.82	-151.08	-83.80	Start 2724.44 hold at 1300.00 MD
4,024.44	3,839.96	-965.95	-535.77	Start Drop -2.00
5,024.44	4,819.77	-1,117.03	-619.57	Start 5164.23 hold at 5024.44 MD
10,188.67	9,984.00	-1,117.03	-619.57	TD at 10188.67

Kerr-McGee Oil & Gas Onshore. L.P.**NBU 1022-4H PAD**

<u>API #</u>	<u>NBU 1022-4J1BS</u>		
	Surface: 2412 FNL / 1200 FEL	SENE	Lot
	BHL: 2485 FSL / 1810 FEL	NWSE	Lot
<u>API #</u>	<u>NBU 1022-4J1CS</u>		
	Surface: 2416 FNL / 1190 FEL	SENE	Lot
	BHL: 2086 FSL / 1813 FEL	NWSE	Lot
<u>API #</u>	<u>NBU 1022-4J4BS</u>		
	Surface: 2419 FNL / 1181 FEL	SENE	Lot
	BHL: 1753 FSL / 1813 FEL	NWSE	Lot
<u>API #</u>	<u>NBU 1022-4J4CS</u>		
	Surface: 2422 FNL / 1172 FEL	SENE	Lot
	BHL: 1419 FSL / 1813 FEL	NWSE	Lot

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 10-11, 2012. Present were:

- Dave Gordon, Lynn Dehner, Aaron Roe and Melissa Wardle - BLM;
- Mitch Batty - Timberline Engineering & Land Surveying, Inc.;
- Jacob Dunham - 609 Consulting, LLC.;
- Alan Rabinoff - ICF International;
- Gina Becker, Tony Kazeck, Casey McKee, Charles Chase and Randy Townley- Kerr-McGee

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.

The following segments are "on-lease"

No new access road is proposed for this well location.

C. Location of Existing Wells:

Please refer to Topo C for existing 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 1022-4H-3, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on February 25, 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 gas gathering pipeline distance from the meter to the tie in point is $\pm 400'$ and the individual segments are broken up as follows:

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

- $\pm 345'$ (0.07 miles) – Section 4 T10S R22E (N/2) – On-lease UTU01191, BLM surface,
New 6" buried gas gathering pipeline from the meter to the edge of the pad. Please refer to
Topo D2 - Pad and Pipeline Detail.
- $\pm 55'$ (0.01 miles) – Section 4 T10S R22E (N/2) – On-lease UTU01191, BLM surface,
New 6" buried gas gathering pipeline from the edge of the pad to the existing 16" gas pipeline
to the east of the pad. Please refer to Exhibit A, Line 4.

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 $\pm 400'$ and the individual segments are broken up as follows:

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

- $\pm 345'$ (0.07 miles) – Section 4 T10S R22E (N/2) – On-lease UTU01191, BLM surface, New 6" buried liquid gathering pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.
- $\pm 55'$ (0.01 miles) – Section 4 T10S R22E (N/2) – On-lease UTU01191, BLM surface, New 6" buried liquid gathering pipeline from the edge of the pad to existing 6" liquid pipeline to the east of the pad. Please refer to Exhibit B, Line 5.

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 report was completed on November 30, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 12-314.

A paleontological reconnaissance survey report was completed December 2012 by SWCA Environmental Consultants. For additional details please refer to report UT12-14314-206.

Biological field survey was completed August 26-November 9, 2012 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-862.

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.

NBU 1022-4J1BS/ NBU 1022-4J1CS/ NBU 1022-4J4BS
NBU 1022-4J4CS Kerr-McGee Oil Gas Onshore, LP.

Surface Use Plan of Operations
6 of 6

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

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

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

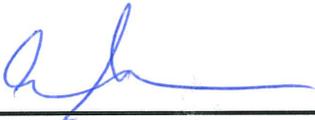
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

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

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

Bond coverage 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.

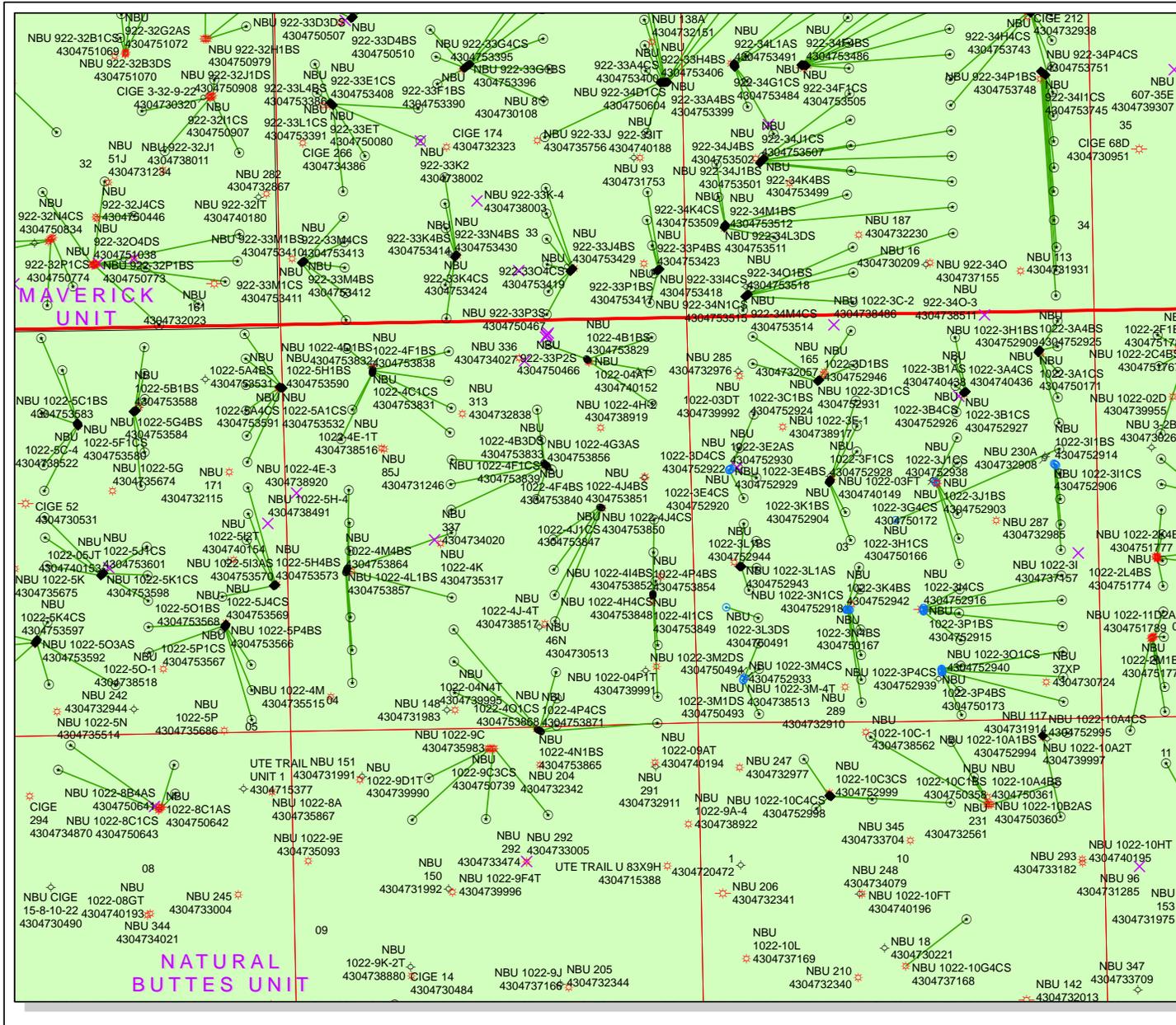


Cara Mahler

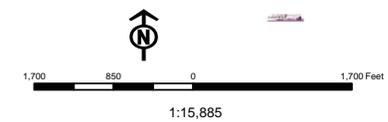
April 4, 2013
Date

API Number: 4304753851
Well Name: NBU 1022-4J4BS
Township T10.0S Range R22.0E Section 04
Meridian: SLBM
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason



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



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/6/2013

API NO. ASSIGNED: 43047538510000

WELL NAME: NBU 1022-4J4BS

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

PHONE NUMBER: 720 929-6029

CONTACT: Cara Mahler

PROPOSED LOCATION: SENE 04 100S 220E

Permit Tech Review:

SURFACE: 2419 FNL 1181 FEL

Engineering Review:

BOTTOM: 1753 FSL 1813 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 39.97854

LONGITUDE: -109.43968

UTM SURF EASTINGS: 633233.00

NORTHINGS: 4426541.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-01191

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

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

Comments: Presite Completed

Stipulations: 3 - Commingle - ddoucet
 4 - Federal Approval - dmason
 15 - Directional - dmason
 17 - Oil Shale 190-5(b) - dmason



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 1022-4J4BS
API Well Number: 43047538510000
Lease Number: UTU-01191
Surface Owner: FEDERAL
Approval Date: 6/13/2013

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 173-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

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

Commingle:

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

General:

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

Conditions of Approval:

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

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

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil

shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

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

RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APR 11 2013

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU01191
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator KERR MCGEE OIL & GAS LP		7. If Unit or CA Agreement, Name and No. UTU63047A
Contact: CARA MAHLER E-Mail: cara.mahler@anadarko.com		8. Lease Name and Well No. NBU 1022-4J4BS
3a. Address PO BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (include area code) Ph: 720-929-6029 Fx: 720-929-7029	9. API Well No. 43 047 53851
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SENE 2419FNL 1181FEL 39.978628 N Lat, 109.439697 W Lon At proposed prod. zone NWSE 1753FSL 1813FEL 39.975561 N Lat, 109.441908 W Lon		10. Field and Pool, or Exploratory NATURAL BUTTES
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 50.3 MILES SOUTH OF VERNAL		11. Sec., T., R., M., or Blk. and Survey or Area Sec 4 T10S R22E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1224	16. No. of Acres in Lease 1041.80	12. County or Parish UINTAH
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 395	19. Proposed Depth 10189 MD 9984 TVD	13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5057 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well
		20. BLM/BIA Bond No. on file WYB000291
		23. Estimated duration 60-90 DAYS

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 04/05/2013
Title REGULATORY ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date AUG 22 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.

CONDITIONS OF APPROVAL ATTACHED

RECEIVED

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.

AUG 30 2013

Additional Operator Remarks (see next page)

DIV. OF OIL, GAS & MINING

Electronic Submission #203671 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 04/15/2013

UDOGM

NOTICE OF APPROVAL

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

Additional Operator Remarks:

The following wells are also on the NBU 1022-4H Pad:

NBU 1022-4J1BS
NBU 1022-4J1CS
NBU 1022-4J4BS
NBU 1022-4J4CS

The filing fee for this well will be hand delivered or sent via overnight UPS delivery.

Please contact Cara Mahler at 720-929-6029, or via email at cara.mahler@anadarko.com with any questions, comments or concerns regarding this application.

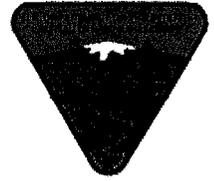


UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

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, LP
Well No: NBU 1022-4J4BS
API No: 43-047-53851

Location: SENE, Sec. 4, T10S, R22E
Lease No: UTU-01191
Agreement: Natural Butte

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.
- 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).
- Pipelines in the NWNW and SESW quarter quarters of section 4 T10S R22E: Paleontological monitoring by a BLM permitted paleontologist is required during all ground-disturbing activities (BLM 2012b).
- 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 cattle guards, including upgrading cattle guard 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 cattle guard and gate installed per BLM guidance.

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

SITE SPECIFIC DOWNHOLE COAs:

- Gamma Ray Log shall be run from Total Depth to Surface.
- CBL will be run from TD to TOC.
- Cement for the surface casing will be circulated to the surface.

Variances Granted
Air Drilling

- All variances approved as written in APD.

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 in CD (compact disc) format to the Vernal BLM Field Office. 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.	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191
1. TYPE OF WELL Gas Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	8. WELL NAME and NUMBER: NBU 1022-4J4BS
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2419 FNL 1181 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 04 Township: 10.0S Range: 22.0E Meridian: S	9. API NUMBER: 43047538510000
PHONE NUMBER: 720 929-6111	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: 6/13/2014	<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: April 16, 2014

By: 

NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBER 720 929-6236	TITLE Staff Regulatory Specialist
SIGNATURE N/A	DATE 4/14/2014	



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 43047538510000

API: 43047538510000

Well Name: NBU 1022-4J4BS

Location: 2419 FNL 1181 FEL QTR SENE SEC 04 TWNP 100S RNG 220E MER S

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

Date Original Permit Issued: 6/13/2013

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: 4/14/2014

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	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Gas Well	7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	8. WELL NAME and NUMBER: NBU 1022-4J4BS
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	9. API NUMBER: 43047538510000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2419 FNL 1181 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 04 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
	COUNTY: Uintah
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 11/22/2014	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Spud well 11/22/2014 @ 15:30. Drill 24" conductor hole to 40', run 14" X .250 wall conductor pipe, cement with 81 sacks ready mix. Anticipated surface spud date and surface casing cement 12/15/2014.

**Accepted by the
 Utah Division of
 Oil, Gas and Mining
 FOR RECORD ONLY
 November 25, 2014**

NAME (PLEASE PRINT) Doreen Green	PHONE NUMBER 435 781-9758	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 11/25/2014	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-4J4BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047538510000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6100	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2419 FNL 1181 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 04 Township: 10.0S Range: 22.0E Meridian: S	COUNTY: UINTAH	
	STATE: UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 3/30/2015	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Drilled surface to 2,358 ft in Quarter 1 of 2015. Waiting on production. Thank you.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 31, 2015		
NAME (PLEASE PRINT) Kristina Geno	PHONE NUMBER 720 929-6824	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 3/30/2015	

State of Utah - Notification Form

Operator Anadarko Petroleum Rig Name/# SST 57
Submitted By SID ARMSTRONG/DWIGHT FISHER Phone Number
435-828-0985
Well Name/Number NBU 1022-4J4BS
Qtr/Qtr SE/NE Section 4 Township 10S Range 22E
Lease Serial Number ~~UTU-63047A~~ UTU 01191
API Number 43-047-53851

Casing – Time casing run starts, not cementing times.

- Production Casing
- Other

Date/Time 4/27/2015 12:00 AM PM

BOPE

- Initial BOPE test at surface casing point
- Other

Date/Time _____ AM PM

Rig Move

Location To: _

Date/Time _ _ AM PM

Remarks _____

TIME IS APPROXIMATE

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047538510000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6100
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2419 FNL 1181 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 04 Township: 10.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES COUNTY: UINTAH STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/29/2015	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width:100px;" type="text"/>

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

Drilled production to 9,087 ft in Quarter 2 of 2015. Waiting for completion. Thank you.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 June 30, 2015

NAME (PLEASE PRINT) Jennifer Thomas	PHONE NUMBER 720 929-6808	TITLE Regulatory Specialist
SIGNATURE N/A	DATE 6/29/2015	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191	
SUNDRY NOTICES AND REPORTS ON WELLS	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
8. WELL NAME and NUMBER: NBU 1022-4J4BS	
9. API NUMBER: 43047538510000	
9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
1. TYPE OF WELL Gas Well	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 PHONE NUMBER: 720 929-6100	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2419 FNL 1181 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 04 Township: 10.0S Range: 22.0E Meridian: S	
COUNTY: UINTAH	
STATE: UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 7/21/2015	<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 checked="" type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

The NBU 1022-4J4BS was placed on production 07/21/2015 after a new well completion. Producing from the MESAVERDE.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 July 27, 2015

NAME (PLEASE PRINT) Doreen Green	PHONE NUMBER 435 781-9758	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 7/21/2015	

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
UTU01191

1a. Type of Well Oil Well Gas Well Dry Other
 b. Type of Completion New Well Work Over Deepen Plug Back Diff. Resvr.
 Other _____

6. If Indian, Allottee or Tribe Name _____

7. Unit or CA Agreement Name and No.
UTU63047A

2. Name of Operator
KERR-MCGEE OIL AND GAS ONSHORE
Contact: JENNIFER THOMAS
Email: Jennifer.Thomas@anadarko.com

8. Lease Name and Well No.
NBU 1022-4J4BS

3. Address P.O. BOX 173779
DENVER, CO 80217

3a. Phone No. (include area code)
Ph: 720-929-6808

9. API Well No.
43-047-53851

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
 At surface SENE 2419FNL 1181FEL 39.978628 N Lat, 109.439697 W Lon
 At top prod interval reported below NWSE 1753FSL 1803FEL
 At total depth NWSE 1739FSL 1795FEL 39.975568 N Lat, 109.441889 W Lon

10. Field and Pool, or Exploratory
NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey
or Area Sec 4 T10S R22E Mer SLB

12. County or Parish
UINTAH

13. State
UT

14. Date Spudded
11/22/2014

15. Date T.D. Reached
04/26/2015

16. Date Completed
 D & A Ready to Prod.
07/21/2015

17. Elevations (DF, KB, RT, GL)*
5075 KB

18. Total Depth: MD 9087
TVD 8881

19. Plug Back T.D.: MD 9016
TVD 8811

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
TRIPLE COMBO, RADIAL CEMENT BOND GAMMA RAY CCL TEM

22. Was well cored? No Yes (Submit analysis)
 Was DST run? No Yes (Submit analysis)
 Directional Survey? No Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
24.000	14.000 STL	36.7	0	40		81			
11.000	8.625 J-55	28.0	18	2342		900		0	
7.875	4.500 I-80	11.6	18	9063		1785		1240	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	8471							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESA VERDE	6956	9087	7032 TO 8973	0.410	192	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7032 TO 8973	PUMP 11681 BBLS SLICKWATER, 48 BBLS HCL ACID (12.5%-18%), 249861 LBS 30/50 MESH SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/21/2015	08/04/2015	24		0.0	1136.0	185.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
18/64	SI	2019.0		0	1136	185		PGW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI								

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #313091 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER BIRD'S NEST MAHOGANY WASATCH MESA VERDE	1111 1417 1967 4481 6956

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #313091 Verified by the BLM Well Information System.
For KERR-MCGEE OIL AND GAS ONSHORE, sent to the Vernal**

Name (please print) JENNIFER THOMAS Title REGULATORY SPECIALIST III

Signature (Electronic Submission) Date 08/18/2015

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

RECEIVED: Aug. 18, 2015

US ROCKIES REGION
Operation Summary Report

US ROCKIES REGION									
Operation Summary Report									
Well: NBU 1022-4J4BS BLUE					Spud date: 1/29/2015				
Project: UTAH-UINTAH			Site: NBU 1022-4H PAD			Rig name no.: SST 57/57, PROPETRO 11/11			
Event: DRILLING			Start date: 1/29/2015			End date: 4/28/2015			
Active datum: RKB @5,075.00usft (above Mean Sea Level)			UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation	
12/1/2014	15:30 - 16:30	1.00	DRLCON	2	A	P	18	DRILL 24" CONDUCTOR HOLE TO 40'	
	16:30 - 17:30	1.00	DCSGCON	12	E	P	58	SET 14" CONDUCTOR CASING AND CEMENT WITH 81 SX CEMENT	
1/29/2015	0:00 - 7:00	7.00	MIRU	01	E	P	58	RIG DOWN ,PREP FOR MOVE,SAFETY MEET WITH ALL THIRD PARTY PEOPLE	
	7:00 - 12:00	5.00	MIRU	01	A	P	58	RIG DOWN AND MOVE OUT PRO PETRO RIG AND PIPE TRAILERS TO NBU 1022-4H PAD / TRANSFER 2 UPRIGHTS TO NEW LOCATION & CLEAN MUD TANKS / WAIT ON DAYLIGHT TO MOVE BACK YARD AND HEAVY EQUIPMENT , CLOSED LOOP SYSTEM. PROPETRO 1 SEMI-TRUCKS, J.D FIELD SERVICE HAD 2 BEDTRUCK , 4 HAUL TRUCKS, 1TRUCK PUSHER , 2 SWAMPERS, 1 FORKLIFT , 1 RIG, 1 CREW RIDE, 1 RIG PUSHER, RIG DOWN AND MOVE OUT TRAILERS WITH CIVEO & RIG UP, SET IN BACK YARD AND RIG UP	
	12:00 - 17:30	5.50	MIRU	01	B	P	58	CONTINUE TO RIG UP PITS,PUMPS UPRIGHTS SET BACK YARD, RIG UP CLEAN HARBORS, RELEASE JD FEILD SERVICES TRUCKS AT 13:00 1/29/2015	
	17:30 - 18:00	0.50	MIRU	23		P	58	PRE TOUR SAFETY	
	18:00 - 21:30	3.50	MIRU	01	B	P	58	RIG UP	
	21:30 - 22:30	1.00	MIRU	06	A	P	58	PICK UP NOV 1.83 DEGREE BENT MOTOR (RUN # 1) .17 REV/GAL PICK UP 12.25" DRILL BIT. SPUD ACTUAL@ 1/29/2015 22:30 PM	
	22:30 - 0:00	1.50	DRLSUR	02	B	P	58	DRILL 12.25" HOLE F/ 44' T/ 150 (106'@70'PH) WEIGHT ON BIT ALL STROKES PER MINUTE = 120 GALLONS PER MINUTE = 491 PRESSURE ON/OFF (BOTTOM) 560/420 ROTARY RPM 55 MOTOR RPM 83 TOTAL RPM 138 UP/DOWN/ ROTATE 25/25/25 K. DRAG 0 K. CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING RUNNING VOLUME OVER BOTH SHAKERS NO HOLE ISSUES	
1/30/2015	0:00 - 1:00	1.00	DRLSUR	02	B	P	164	DRILL 12.25" HOLE F/150 TO 210 (106'@70'PH) WEIGHT ON BIT ALL STROKES PER MINUTE = 120 GALLONS PER MINUTE = 491 PRESSURE ON/OFF (BOTTOM) 560/420 ROTARY RPM 55 MOTOR RPM 83 TOTAL RPM 138 UP/DOWN/ ROTATE 25/25/25 K. DRAG 0 K. CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING RUNNING VOLUME OVER BOTH SHAKERS NO HOLE ISSUES	

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	1:00 - 4:00	3.00	DRLSUR	06	A	P	224	CIRC 15 MINUTES AND TRIP OUT TO CHANGE ASSEMBLY. BREAK 12 1/4" BIT. FINISH MAKING UP 11" BIT. PICK UP 8" DIRECTIONAL ASSEMBLY SCRIBE MOTOR.. TIH
	4:00 - 5:30	1.50	DRLSUR	02	D	P	224	DRILL 11" SURFACE HOLE F/ 210' T/ 320' (73.3'@ 'PH). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE=120, GALLONS PER MINUTE=491. PRESSURE ON/OFF(BOTTOM) 620 / 420. ROTARY RPM 55 MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 32/30/31 K. DRAG 1 K. DIRECTIONAL PLAN CURRENTLY : .0' HIGH / .86' LEFT SLIDE 38' = @ .33HRS CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING. RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES
	5:30 - 6:00	0.50	DRLSUR	23		P	334	PRE TOUR SAFETY MEETING
	6:00 - 12:00	6.00	DRLSUR	02	D	P	334	DRILL 11" SURFACE HOLE F/ 320' TO/ 945' (625 ' @ 104.1 'PH). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE=120, GALLONS PER MINUTE=491. PRESSURE ON/OFF(BOTTOM) 940 / 700. ROTARY RPM 55 MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 62/57/60 K. DRAG 2 K. DIRECTIONAL PLAN CURRENTLY : 16.7' HIGH / 1.34' LEFT SLIDE 55' = @ .47 HRS CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING. RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES
	12:00 - 17:30	5.50	DRLSUR	02	D	P	959	DRILL 11" SURFACE HOLE F/ 945 TO 1365 (420 '@76.3 'PH). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE=120, GALLONS PER MINUTE=491. PRESSURE ON/OFF(BOTTOM) 1000 /800. ROTARY RPM 55 MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 65/60/63 K. DRAG 2 K. DIRECTIONAL PLAN CURRENTLY : 15.7' HIGH / .54' LEFT SLIDE 117' = @ 1.42 HRS CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING. RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES
	17:30 - 18:00	0.50	DRLSUR	23		P	1379	PRE TOUR SAFETY MEETING

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	18:00 - 0:00	6.00	DRLSUR	02	D	P	1379	DRILL 11" SURFACE HOLE F/1365 TO 1870 (505'@ 84 'PH). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE=120, GALLONS PER MINUTE=491. PRESSURE ON/OFF(BOTTOM) 1200/1000. ROTARY RPM 55 MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 75/60/68 K. DRAG 8 K. DIRECTIONAL PLAN CURRENTLY : 7.25' HIGH / 3.54 RIGHT SLIDE 65 ' = @1.25 HRS CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING. RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES AIR ON 1520'
1/31/2015	0:00 - 5:30	5.50	DRLSUR	02	D	P	1884	DRILL 11" SURFACE HOLE F/1870 TO 2170(300'@55 'PH). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE=120, GALLONS PER MINUTE=491. PRESSURE ON/OFF(BOTTOM) 1000 /800. ROTARY RPM 55 MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 78/65/70 K. DRAG 8 K. DIRECTIONAL PLAN CURRENTLY : 5.0' HIGH / 1.65LEFT SLIDE ' = @ HRS CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING. RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES AIR ON 1520'
	5:30 - 6:00	0.50	DRLSUR	23		P	2184	PRE TOUR SAFETY MEET
	6:00 - 8:00	2.00	DRLSUR	02	D	P	2184	DRILL 11" SURFACE HOLE F/2170 TO 2358' (188'@94.0 'PH). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE=120, GALLONS PER MINUTE=491. PRESSURE ON/OFF(BOTTOM) 1000 /800. ROTARY RPM 55 MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 70/60/65 K. DRAG 5 K. DIRECTIONAL PLAN CURRENTLY : 11.16' HIGH / .86 LEFT SLIDE ' = @ HRS CIRCULATE CLOSED LOOP SYSTEM WITH 8.5# WATER. RUNNING VOLUME THROUGH 2 CENTRIFUGE DE WATERING. RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES AIR ON 1520'

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE		Spud date: 1/29/2015	
Project: UTAH-UINTAH		Site: NBU 1022-4H PAD	Rig name no.: SST 57/57, PROPETRO 11/11
Event: DRILLING		Start date: 1/29/2015	End date: 4/28/2015
Active datum: RKB @5,075.00usft (above Mean Sea Level)		UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	8:00 - 10:00	2.00	CSGSUR	05	C	P	2372	CIRCULATE PRIOR TO LDDP, FOR CASING RUN
	10:00 - 14:30	4.50	CSGSUR	06	A	P	2372	TRIP OUT OF HOLE, LAY DOWN DRILL STRING, BHA, LAY DOWN DIRECTIONAL TOOLS, MOTOR, AND, BIT.
	14:30 - 15:30	1.00	CSGSUR	12	A	P	2372	MOVE CAT WALK & PIPE RACKS, JSA, R/U TO RUN 8.625 CSG
	15:30 - 17:30	2.00	CSGSUR	12	C	P	2372	RUN 53 JOINTS OF 8-5/8" 28# J-55 LT&C CASING. RAN 1 CENTRALIZER ON FIRST THREE JOINTS, AND EVERY TWO JOINT FOR 2 JOINTS FOR A TOTAL OF 5 CENTRALIZERS. RUN CASING TO BOTTOM WITH NO PROBLEMS. SET FLOAT SHOE @ 2,328' SET TOP OF BAFFLE PLATE @ 2,284'
	17:30 - 18:00	0.50	CSGSUR	23	O	P	2372	PRE TOUR SAFETY MEETING
	18:00 - 18:30	0.50	CSGSUR	12	C	P	2372	FINISH CASING RUN
	18:30 - 19:00	0.50	CSGSUR	12	B	P	2372	RUN 200' OF 1" PIPE DOWN BACK SIDE OF 8.5/8" CASING ANNULUS, R/D PROPETRO RIG
	19:00 - 22:00	3.00	CSGSUR	12	B	P	2372	PRE JOB SAFETY MEETING WITH PRO PETRO CEMENTERS. RIG UP AND INSTALL CEMENT HEAD, START CEMENT OPERATIONS. PRESSURE TEST LINES TO 1500 PSI. PUMP 110 BBLs H2O AND PUMP 20 BBLs OF 8.4# GEL WATER AHEAD. MIX AND PUMP (300 SX) 61.4 BBLs OF 15.8# 1.15 YP 5 GAL/SK PREMIUM CEMENT W/ 2% CALC. DROP PLUG ON FLY. DISPLACE W/ 128 BBLs OF H2O. NO CIRC THROUGH OUT. FINAL LIFT OF 240 PSI AT 7 BBL/MIN. BUMP PLUG WITH 590 PSI FOR 5 MIN. FLOAT HELD. RELEASE RIG 01-31-2015 @ 22:00 HRS, TOP JOB # 1: PUMP CEMENT DOWN ONE INCH PIPE WITH 150 SX PREMIUM CEMENT WITH 4% CACL2 & .25 LB/SX FLOCELE. 30 BBLs OF SLURRY MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX. NO CEMENT TO SURFACE TOP JOB # 2: PUMP CEMENT DOWN ONE INCH PIPE WITH 150 SX PREMIUM CEMENT WITH 4% CACL2 & .25 LB/SX FLOCELE. 30 BBLs OF SLURRY MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX. CEMENT TO SURFACE. TOP JOB # 3: PUMP CEMENT DOWN ONE INCH PIPE WITH 100 SX PREMIUM CEMENT WITH 4% CACL2 & .25 LB/SX FLOCELE. 20 BBLs OF SLURRY MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX. CEMENT TO SURFACE. TOP JOB # 4: PUMP CEMENT DOWN ONE INCH PIPE WITH 100 SX PREMIUM CEMENT WITH 4% CACL2 & .25 LB/SX FLOCELE. 20 BBLs OF SLURRY MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX. CEMENT TO SURFACE. TOP JOB # 5: PUMP CEMENT DOWN ONE INCH PIPE WITH 100 SX PREMIUM CEMENT WITH 4% CACL2 & .25 LB/SX FLOCELE. 20 BBLs OF SLURRY MIXED AT 15.8 PPG WITH YIELD OF 1.15 CF/SX. CEMENT TO SURFACE. RELEASE CEMENTERS 2-1-2015 @ 07:30 HRS
4/23/2015	12:00 - 13:30	1.50	MIRU3	01	C	P	2372	SKID RIG TO NBU 1022-4G1BS

US ROCKIES REGION

Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	13:30 - 15:30	2.00	PRPSPD	01	B	P	2372	FINISH RIGGING UP ROTARY TOOLS
	15:30 - 16:30	1.00	CSGSUR	14	A	P	2372	NIPPLE B.O.P'S & REPLACE CHOKE LINE
	16:30 - 20:00	3.50	CSGSUR	15	A	P	2372	SAFETY MEET , TEST BOPS RUN TEST ASSY, TEST BOP WITH B&C TESTERS - TEST ANNULAR TO 250 PSI LOW/ 5 MIN 2500 PSI HIGH 10 MIN, PIPE & BLIND RAMS, FLOOR VALVES, IBOP, HCR VALVE, KILL LINE VALVES, TEST BOPS, CHOKE MANIFOLD TO 250 PSI LOW / 5 MIN - 5000 PSI HIGH / 10 MIN, HOLD ACCUMULATOR FUNCTION TEST, TEST CSG 1500 PSI - 30 MIN
	20:00 - 21:00	1.00	CSGSUR	09	A	P	2372	SLIP & CUT 55' OF DRILLING LINE
	21:00 - 21:30	0.50	CSGSUR	14	B	P	2372	INSTALL WEAR RING
	21:30 - 22:30	1.00	CSGSUR	06	A	P	2372	CONFIRM DIRECTIONAL PLANS W/SCIENTIFIC,DIR.WORK, PICK UP MUD MOTOR,SECURITY MM65M BIT, SCRIBE MWD TOOLS SURFACE TEST SAME,P/U BHA ,TIH AND INSTALL ROTATING RUBBER.TAG CEMENT AT 2,255'.
	22:30 - 23:30	1.00	DRLPRC	02	F	P	2372	DRILL CEMENT & SHOE TRACK FROM 2255' TO 2372'. DRILL BAFFLE @ 2286' - SHOE @2330'
	23:30 - 0:00	0.50	DRLPRC	02	D	P	2372	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/2372 TO 2453 = 81' @ 162' / PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 5 - 9K STPP = 1200 STAND OFF BOTTOM = 960 0' Low / 0' Left Slide 0 @ 0% = 0 Hrs / Rot 81' @ 100 % = 0.50 Hrs 2310/ INC 21.10 AZ 204.52 STRING WEIGHT UP/DOWN/ROTATING = 85K / 72K / 80K HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.6 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
4/24/2015	0:00 - 12:00	12.00	DRLPRC	02	D	P	2453	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 2453 TO 3882 = 1429' @ 119.0' / PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 5 - 9K STPP =1450 STAND OFF BOTTOM = 1200 5.1' High / .7' Left Slide 196' @ 13.2% = 2.67 Hrs / Rot 1279' @ 86.8% = 7.83 Hrs STRING WEIGHT UP/DOWN/ROTATING = 85K / 72K / 80K HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.5 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	12:00 - 16:00	4.00	DRLPRC	02	D	P	3882	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 3882 TO 4358 = 476' @ 119.0' / PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 5 - 9K STPP =1450 STAND OFF BOTTOM = 1200 3.0' Low / 2.3' Left Slide 58' @ 12.1% = .83 Hrs / Rot 418' @ 87.9% = 2.67 Hrs STRING WEIGHT UP/DOWN/ROTATING = 135K / 90K / 115K HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.5 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	16:00 - 16:30	0.50	DRLPRC	07	A	P	4358	SERVICE RIG

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	16:30 - 0:00	7.50	DRLPRC	02	D	P	4358	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 3882 TO 5405 = 1523' @ 203' / PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 9 - 14K STPP =1930 STAND OFF BOTTOM = 1630 8.5' North / 5' West Slide 78' @ 7.54% = 1.42 Hrs / Rot 969' @ 92.55% = 5.33 Hrs STRING WEIGHT UP/DOWN/ROTATING 170/120/129 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.6 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
4/25/2015	0:00 - 10:30	10.50	DRLPRO	02	B	P	5405	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 5405 TO 6735 = 1330' @ 126.6' / PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 9 - 14K STPP =1930 STAND OFF BOTTOM = 1630 17' North / 6' West Slide 16' @ 1.2% = .33 Hrs / Rot 1314' @ 98.8% = 9.83 Hrs STRING WEIGHT UP/DOWN/ROTATING 210/115/155 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.6 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	10:30 - 12:30	2.00	DRLPRO	08	A	Z	6735	WORK ON TOP DRIVE (ROTARY DRIVE CARD)

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	12:30 - 15:30	3.00	DRLPRO	02	B	P	6735	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 6735 TO 7213/= ' @ 478' / 159.3PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 9 - 14K STPP =1930 STAND OFF BOTTOM = 1630 16' North / 3' West Slide 15' @ 3.1% = 0.33 Hrs / Rot 465' @ 96.9% = 3.08 Hrs STRING WEIGHT UP/DOWN/ROTATING 215/120/160 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.6 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	15:30 - 16:00	0.50	DRLPRO	07	A	P	7215	SERVE RIG
	16:00 - 0:00	8.00	DRLPRO	02	B	P	7215	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 7213 TO 8068' = 855' @ 106.8'/ PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 15 - 17K STPP =2200 STAND OFF BOTTOM = 1950 16' North / 5' West Slide 24' @ 2.8% = 1.08 Hrs / Rot 829' @ 97.2% = 6.17 Hrs STRING WEIGHT UP/DOWN/ROTATING 244/135/172 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.6 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
4/26/2015	0:00 - 5:00	5.00	DRLPRO	02	B	P	8068	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 8068' TO 8453 = 385' @ 77.0'/ PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 2 PUMPS @120 GALLONS PER MINUTE = 590 MUD MOTOR RPM =83 TOP DRIVE RPM = 55 - 65 TOTAL RPM = 145 FT/LBS TORQUE = 15 - 17K STPP =2200 STAND OFF BOTTOM = 1950 16' North / 5' West Slide 0' @ 0% = 0 Hrs / Rot 385' @ 100% = 4.33 Hrs STRING WEIGHT UP/DOWN/ROTATING 244/135/172 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE - RUNNING DE-SANDER - RUNNING MUD WEIGHT = 8.6 PPG VISCOSITY = 27 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	5:00 - 6:30	1.50	DRLPRO	05	G	P	8453	DISPLACE HOLE WITH HEAVY MUD
	6:30 - 12:00	5.50	DRLPRO	02	B	P	8453	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 8453 TO 8859 = 406' @ 73.8'/ PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 1 PUMPS @98 GALLONS PER MINUTE =481 MUD MOTOR RPM =67 TOP DRIVE RPM = 55 TOTAL RPM = 122 FT/LBS TORQUE = 15 - 17K STPP =2630 STAND OFF BOTTOM = 2300 8' North / .2' West Slide 0' @ 0% = 0 Hrs / Rot 406' @ 100% = 5.0 Hrs STRING WEIGHT UP/DOWN/ROTATING 244/135/172 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE DE-SANDER - RUNNING MUD WEIGHT = 12.0 PPG VISCOSITY = 40 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	12:00 - 14:30	2.50	DRLPRO	02	B	P	8859	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 8859 TO 9022 = 163' @ 65.2/ PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 1 PUMPS @98 GALLONS PER MINUTE =481 MUD MOTOR RPM =67 TOP DRIVE RPM = 55 TOTAL RPM = 122 FT/LBS TORQUE = 15 - 17K STPP =2630 STAND OFF BOTTOM = 2300 5' North / 2' East Slide 0' @ 0% = 0 Hrs / Rot 165' @ 100% = 2.17 Hrs STRING WEIGHT UP/DOWN/ROTATING 240/135/175 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE DE-SANDER - RUNNING MUD WEIGHT = 12.0 PPG VISCOSITY = 40 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	14:30 - 15:00	0.50	DRLPRO	07	A	P	9022	SERVICE RIG

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE		Spud date: 1/29/2015	
Project: UTAH-UINTAH		Site: NBU 1022-4H PAD	Rig name no.: SST 57/57, PROPETRO 11/11
Event: DRILLING		Start date: 1/29/2015	End date: 4/28/2015
Active datum: RKB @5,075.00usft (above Mean Sea Level)		UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	15:00 - 16:00	1.00	DRLPRO	02	B	P	9022	DIRECTIONAL DRILL 7.875 PRODUCTION NEW HOLE F/ 9022 TO 9087 = 65' @ 65.0/ PH WEIGHT ON BIT = 18 - 24 K STROKES PER MINUTE 1 PUMPS @98 GALLONS PER MINUTE =481 MUD MOTOR RPM =67 TOP DRIVE RPM = 55 TOTAL RPM = 122 FT/LBS TORQUE = 15 - 17K STPP =2630 STAND OFF BOTTOM = 2300 2' North / 5' East Slide 0' @ 0% = 0 Hrs / Rot 63' @ 100% = .92 Hrs STRING WEIGHT UP/DOWN/ROTATING 240/135/175 HOLE IN GOOD CONDITION BOS - DEWATERING CENTRIFUGE DE-SANDER - RUNNING MUD WEIGHT = 12.0 PPG VISCOSITY = 40 SECONDS DRILLING WITH GYPSUM SYSTEM MIXING HIGH VISCOSITY SWEEPS WITH CALCARB
	16:00 - 17:30	1.50	EVALPR	05	A	P	9087	CIRC BTM UP
	17:30 - 18:30	1.00	EVALPR	06	E	P	9087	10 STD WIPER TRIP
	18:30 - 20:00	1.50	EVALPR	05	A	P	9087	CIRCULATE HOLE CLN
	20:00 - 0:00	4.00	EVALPR	06	B	P	9087	POOH TO RUN PIPE CONVEYED LOGS
4/27/2015	0:00 - 1:30	1.50	EVALPR	06	B	P	9087	T.O.H F/ LOGGING TOOLS
	1:30 - 8:00	6.50	EVALPR	11	E	P	9087	HELD SAFETY MEETING & P/U LOGGING TOOLS & T.I.H W/ SHUTTLE LOGS ON DRILL PIPE
	8:00 - 9:30	1.50	EVALPR	05	A	P	9087	CIRC & DEPLOY WEATHERFORD LOGGING TOOLS & CIRC BTM UP
	9:30 - 17:30	8.00	EVALPR	06	B	P	9087	LOG OUT WITH WEATHERFIRD SHUTTLE LOGS @ 3 MINS PER STAND
	17:30 - 18:00	0.50	EVALPR	14	B	P	9087	PULL WEAR BUSHING
	18:00 - 0:00	6.00	CSGPRO	12	C	P	9087	PJSM W/ FRANKS,R/U CSG TOOLS. RUN 4.5" CASING TO 6800',RUN 91 JTS + 1 MARKER JT 4 1/2", 11.6# I-80, LT&C CASING + 113 JTS + CROSSOVER + PUP JT, 4 1/2", 11.6#, I-80, DQX CASING,SHOE SET @ 9062', FLOAT COLLAR @ 9017', RAN 15 CENT'S, TOP OF MESEVERDE MKR JT @ 6990'.
4/28/2015	0:00 - 1:30	1.50	CSGPRO	12	C	P	9087	PJSM W/ FRANKS,R/U CSG TOOLS. RUN 4.5" CASING TO 6800',RUN 91 JTS + 1 MARKER JT 4 1/2", 11.6# I-80, LT&C CASING + 113 JTS + CROSSOVER + PUP JT, 4 1/2", 11.6#, I-80, DQX CASING,SHOE SET @ 9062', FLOAT COLLAR @ 9017', RAN 15 CENT'S, TOP OF MESEVERDE MKR JT @ 6990'.
	1:30 - 3:00	1.50	CSGPRO	05	D	P	9087	CIRC BTM UP

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE

Spud date: 1/29/2015

Project: UTAH-UINTAH

Site: NBU 1022-4H PAD

Rig name no.: SST 57/57, PROPETRO 11/11

Event: DRILLING

Start date: 1/29/2015

End date: 4/28/2015

Active datum: RKB @5,075.00usft (above Mean Sea Level)

UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	3:00 - 7:00	4.00	CSGPRO	12	E	P	9087	CEMENT W/ HALLIBURTON - HOLD SAFETY MEETING - TEST LINES TO 5000 PSI - PUMP 20 BBLS WATER & 10 BBL GELLED SPACER - 197 BBLS LEAD CEMENT 565 SKS @ 12.5 PPG W/ 1.96 YIELD , MIX & PUMP 261 BBLS TAIL CEMENT 1220 SKS @ 14.3 PPG W/ 1.27 YIELD - WASH UP LINES - DISPLACE W/ 140 BBLS WATER - BUMP PLUG TO 3100 PSI - 2630 PSI FINAL LIFT PRESSURE PRIOR TO BUMP PLUG / FLOAT HELD / FULL RETURNS THROUGH JOB / 10 BBLS OF CEMENT BACK TO SURFACE - PUMPED 45% EXCESS ON LEAD & 25% EXCESS ON TAIL CEMENT. EST TOP OF TAIL IS 2657
	7:00 - 8:00	1.00	RDMO	14	B	P	9087	SET PACK OFF AND TEST,LAYDOWN LANDING JOINT
	8:00 - 9:00	1.00	RDMO	14	A	P	9087	NIPPLE DOWN BOP,CLEAN MUD TANKS ,TRANSFER FLUID,RIG RELEASE@09:00 AM ON 4/28/2015



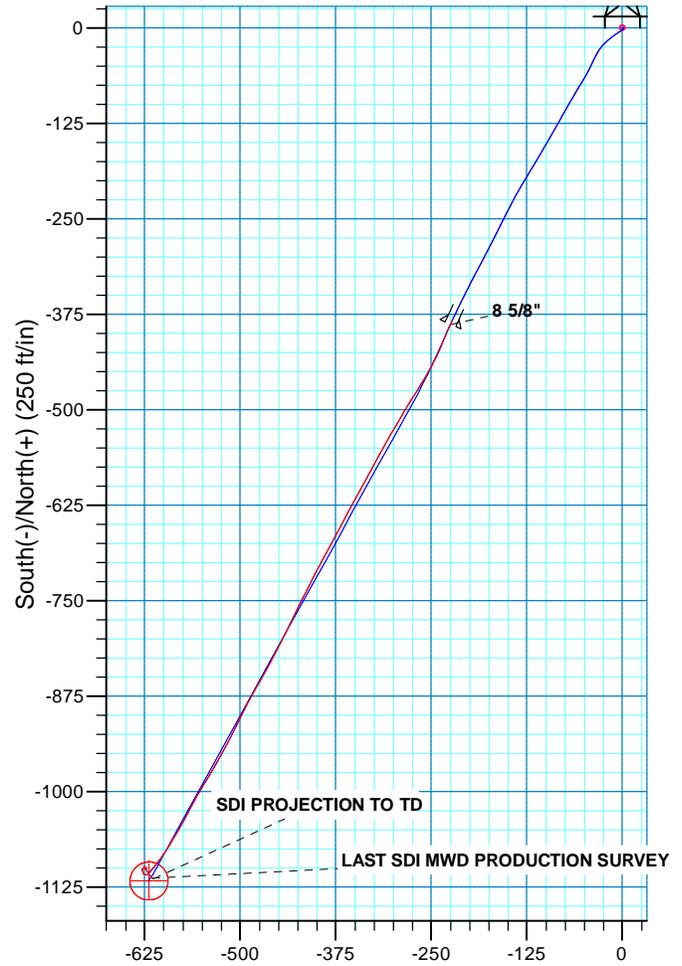
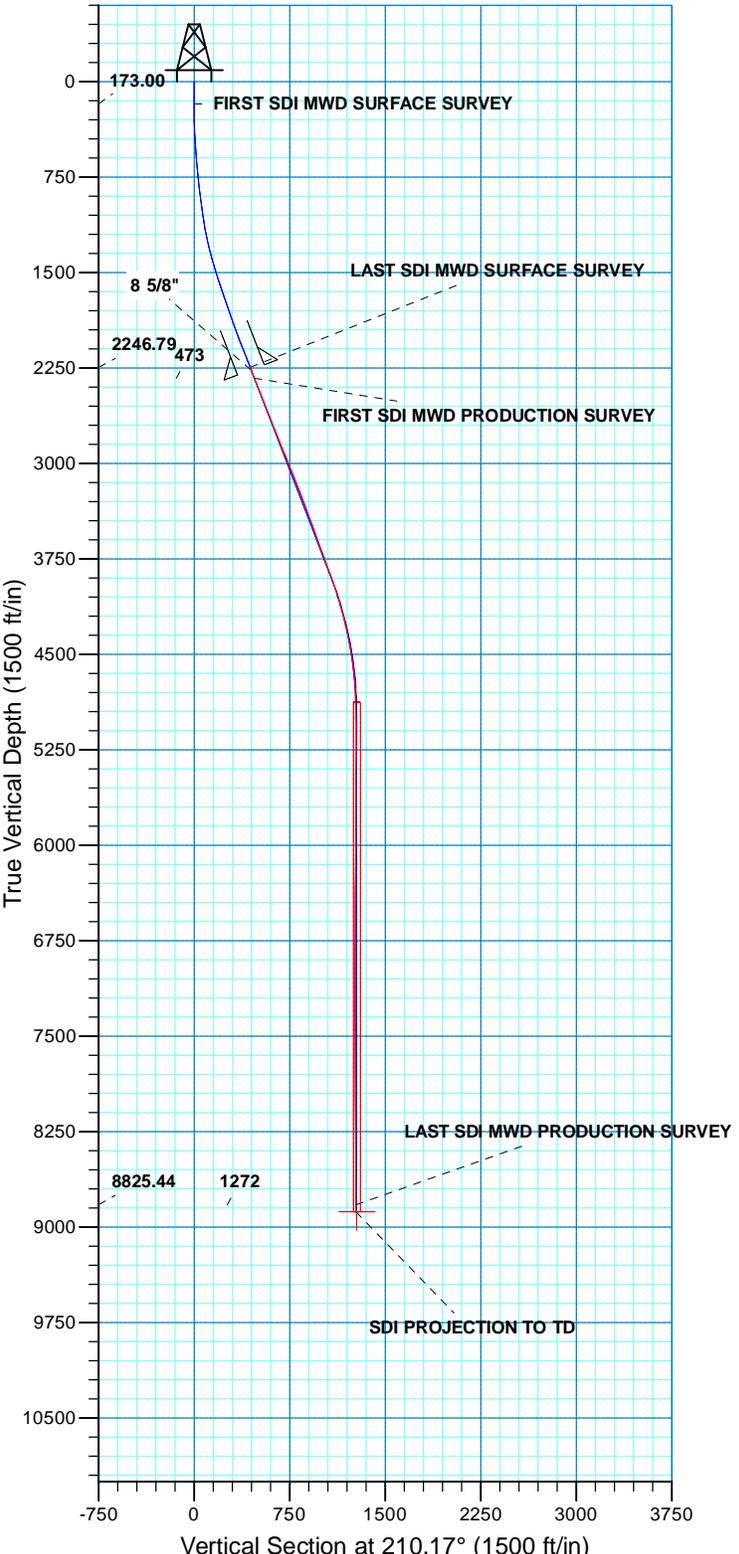
WELL DETAILS: NBU 1022-4J4BS

GL 5057 & KB 18 @ 5075.00ft (SST 57)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14522102.86	2077729.35	39.9786630	-109.4390140

Azimuths to True North
 Magnetic North: 10.73°

 Magnetic Field
 Strength: 51862.3snT
 Dip Angle: 65.77°
 Date: 12/1/2014
 Model: BGGM2014



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 4 T10S R22E
 System Datum: Mean Sea Level

REC



Survey Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Site:	NBU 1022-4H PAD	MD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Well:	NBU 1022-4J4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

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

Site	NBU 1022-4H PAD, SECTION 4 T10S R22E				
Site Position:		Northing:	14,522,108.72 usft	Latitude:	39.9786800
From:	Lat/Long	Easting:	2,077,710.18 usft	Longitude:	-109.4390820
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.00 °

Well	NBU 1022-4J4BS, 2419 FNL 1181 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,522,102.87 usft	Latitude:	39.9786630
	+E/-W	0.00 ft	Easting:	2,077,729.34 usft	Longitude:	-109.4390140
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,057.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	12/1/2014	10.73	65.77	51,862

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	210.17	

Survey Program	Date	5/4/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
14.00	2,310.00	Survey #1 SDI MWD SURFACE (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,397.00	9,087.00	Survey #2 SDI MWD PRODUCTION (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173.00	0.62	89.12	173.00	0.01	0.86	-0.44	0.39	0.39	0.00	
FIRST SDI MWD SURFACE SURVEY										
265.00	1.49	204.08	264.99	-1.07	0.87	0.49	2.00	0.95	124.96	
356.00	2.99	233.79	355.92	-3.55	-1.53	3.84	2.03	1.65	32.65	
447.00	3.69	235.90	446.76	-6.60	-5.87	8.65	0.78	0.77	2.32	
537.00	4.13	235.90	536.55	-10.04	-10.95	14.18	0.49	0.49	0.00	
627.00	5.01	229.30	626.27	-14.42	-16.61	20.81	1.14	0.98	-7.33	
717.00	5.72	227.55	715.87	-20.01	-22.90	28.81	0.81	0.79	-1.94	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Site:	NBU 1022-4H PAD	MD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Well:	NBU 1022-4J4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
807.00	6.16	215.68	805.39	-26.96	-29.03	37.89	1.45	0.49	-13.19	
897.00	7.02	205.44	894.80	-35.85	-34.21	48.18	1.61	0.96	-11.38	
987.00	7.72	208.53	984.06	-46.12	-39.46	59.71	0.89	0.78	3.43	
1,077.00	9.15	207.24	1,073.08	-57.80	-45.62	72.90	1.60	1.59	-1.43	
1,167.00	10.64	211.02	1,161.74	-71.28	-53.18	88.35	1.81	1.66	4.20	
1,257.00	11.84	209.92	1,250.01	-86.41	-62.06	105.89	1.35	1.33	-1.22	
1,347.00	14.16	209.35	1,337.70	-104.01	-72.07	126.14	2.58	2.58	-0.63	
1,437.00	16.61	209.74	1,424.47	-124.77	-83.85	150.01	2.72	2.72	0.43	
1,527.00	17.59	209.97	1,510.49	-147.72	-97.02	176.47	1.09	1.09	0.26	
1,616.00	18.73	210.93	1,595.05	-171.63	-111.08	204.21	1.32	1.28	1.08	
1,706.00	19.35	211.55	1,680.13	-196.73	-126.31	233.56	0.72	0.69	0.69	
1,796.00	19.08	208.12	1,765.12	-222.41	-141.05	263.17	1.29	-0.30	-3.81	
1,886.00	18.99	206.19	1,850.20	-248.53	-154.44	292.48	0.71	-0.10	-2.14	
1,976.00	19.96	207.07	1,935.05	-275.35	-167.90	322.43	1.13	1.08	0.98	
2,066.00	20.22	207.95	2,019.57	-302.76	-182.18	353.31	0.44	0.29	0.98	
2,156.00	21.90	207.77	2,103.56	-331.36	-197.29	385.62	1.87	1.87	-0.20	
2,246.00	21.54	205.75	2,187.17	-361.09	-212.29	418.86	0.92	-0.40	-2.24	
2,310.00	21.10	204.52	2,246.79	-382.15	-222.17	442.04	0.98	-0.69	-1.92	
LAST SDI MWD SURFACE SURVEY										
2,397.00	20.45	201.59	2,328.13	-410.53	-234.26	472.66	1.41	-0.75	-3.37	
FIRST SDI MWD PRODUCTION SURVEY										
2,492.00	21.55	208.77	2,416.84	-441.27	-248.77	506.51	2.94	1.16	7.56	
2,587.00	22.14	212.08	2,505.02	-471.73	-266.68	541.85	1.44	0.62	3.48	
2,683.00	21.12	210.84	2,594.26	-501.91	-285.15	577.23	1.16	-1.06	-1.29	
2,778.00	22.02	209.48	2,682.60	-532.11	-302.69	612.15	1.08	0.95	-1.43	
2,873.00	22.17	209.47	2,770.63	-563.22	-320.27	647.88	0.16	0.16	-0.01	
2,968.00	21.32	208.05	2,858.87	-594.06	-337.21	683.06	1.05	-0.89	-1.49	
3,063.00	23.09	208.76	2,946.82	-625.64	-354.30	718.94	1.88	1.86	0.75	
3,159.00	21.59	208.08	3,035.61	-657.72	-371.67	755.42	1.59	-1.56	-0.71	
3,254.00	21.44	207.66	3,123.99	-688.52	-387.96	790.23	0.23	-0.16	-0.44	
3,349.00	21.67	208.29	3,212.35	-719.35	-404.33	825.10	0.34	0.24	0.66	
3,445.00	20.44	205.69	3,301.94	-750.06	-420.00	859.53	1.61	-1.28	-2.71	
3,540.00	20.80	206.14	3,390.85	-780.15	-434.62	892.90	0.41	0.38	0.47	
3,635.00	20.11	207.23	3,479.86	-809.82	-449.52	926.03	0.83	-0.73	1.15	
3,730.00	19.85	209.14	3,569.15	-838.43	-464.85	958.47	0.74	-0.27	2.01	
3,826.00	21.03	209.25	3,659.10	-867.69	-481.21	991.99	1.23	1.23	0.11	
3,921.00	20.45	206.89	3,747.94	-897.37	-497.04	1,025.60	1.07	-0.61	-2.48	
4,016.00	19.21	205.67	3,837.31	-926.26	-511.32	1,057.75	1.38	-1.31	-1.28	
4,112.00	18.86	209.39	3,928.06	-954.01	-525.77	1,089.02	1.32	-0.36	3.88	
4,207.00	18.52	211.88	4,018.06	-980.20	-541.28	1,119.45	0.91	-0.36	2.62	
4,302.00	16.27	210.41	4,108.71	-1,004.50	-555.98	1,147.84	2.41	-2.37	-1.55	
4,397.00	14.19	206.00	4,200.37	-1,026.44	-567.83	1,172.77	2.50	-2.19	-4.64	
4,492.00	13.07	209.95	4,292.69	-1,046.21	-578.29	1,195.12	1.53	-1.18	4.16	



Survey Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Site:	NBU 1022-4H PAD	MD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Well:	NBU 1022-4J4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,588.00	10.96	211.41	4,386.58	-1,063.41	-588.47	1,215.10	2.22	-2.20	1.52	
4,683.00	9.43	212.53	4,480.08	-1,077.68	-597.36	1,231.91	1.62	-1.61	1.18	
4,778.00	7.32	216.97	4,574.06	-1,089.08	-605.19	1,245.70	2.32	-2.22	4.67	
4,873.00	6.08	219.44	4,668.41	-1,097.80	-612.02	1,256.67	1.34	-1.31	2.60	
4,969.00	4.22	219.55	4,764.02	-1,104.45	-617.50	1,265.18	1.94	-1.94	0.11	
5,064.00	2.12	227.81	4,858.87	-1,108.33	-621.03	1,270.30	2.26	-2.21	8.69	
5,159.00	0.92	295.28	4,953.84	-1,109.18	-623.02	1,272.04	2.06	-1.26	71.02	
5,254.00	0.95	292.61	5,048.83	-1,108.55	-624.44	1,272.21	0.06	0.03	-2.81	
5,349.00	0.78	270.30	5,143.82	-1,108.25	-625.81	1,272.63	0.39	-0.18	-23.48	
5,444.00	0.28	259.29	5,238.81	-1,108.29	-626.69	1,273.11	0.53	-0.53	-11.59	
5,539.00	1.37	351.74	5,333.81	-1,107.20	-627.08	1,272.37	1.48	1.15	97.32	
5,635.00	0.90	352.79	5,429.79	-1,105.32	-627.34	1,270.87	0.49	-0.49	1.09	
5,730.00	0.83	338.00	5,524.78	-1,103.94	-627.69	1,269.86	0.25	-0.07	-15.57	
5,825.00	0.42	339.76	5,619.77	-1,102.98	-628.07	1,269.21	0.43	-0.43	1.85	
5,921.00	0.19	287.75	5,715.77	-1,102.60	-628.34	1,269.02	0.35	-0.24	-54.18	
6,016.00	0.34	235.70	5,810.77	-1,102.71	-628.73	1,269.31	0.28	0.16	-54.79	
6,111.00	0.49	176.80	5,905.77	-1,103.27	-628.94	1,269.91	0.45	0.16	-62.00	
6,206.00	0.95	9.65	6,000.76	-1,102.90	-628.78	1,269.51	1.51	0.48	-175.95	
6,301.00	0.90	20.38	6,095.75	-1,101.43	-628.39	1,268.03	0.19	-0.05	11.29	
6,397.00	0.50	36.81	6,191.74	-1,100.39	-627.88	1,266.87	0.46	-0.42	17.11	
6,492.00	0.47	53.67	6,286.74	-1,099.82	-627.31	1,266.11	0.15	-0.03	17.75	
6,587.00	0.37	103.52	6,381.74	-1,099.66	-626.70	1,265.66	0.38	-0.11	52.47	
6,682.00	0.67	91.80	6,476.73	-1,099.75	-625.85	1,265.31	0.33	0.32	-12.34	
6,777.00	0.57	109.74	6,571.73	-1,099.93	-624.85	1,264.96	0.23	-0.11	18.88	
6,873.00	0.87	108.13	6,667.72	-1,100.32	-623.71	1,264.72	0.31	0.31	-1.68	
6,968.00	1.04	118.07	6,762.71	-1,100.95	-622.26	1,264.54	0.25	0.18	10.46	
7,063.00	0.81	303.58	6,857.70	-1,100.98	-622.06	1,264.47	1.95	-0.24	-183.67	
7,159.00	1.15	320.09	6,953.69	-1,099.87	-623.24	1,264.10	0.46	0.35	17.20	
7,254.00	0.89	315.69	7,048.67	-1,098.61	-624.37	1,263.58	0.29	-0.27	-4.63	
7,349.00	0.62	303.64	7,143.66	-1,097.80	-625.31	1,263.35	0.33	-0.28	-12.68	
7,445.00	0.50	209.77	7,239.66	-1,097.87	-625.95	1,263.74	0.86	-0.13	-97.78	
7,540.00	0.82	169.80	7,334.66	-1,098.90	-626.04	1,264.67	0.57	0.34	-42.07	
7,635.00	1.16	154.73	7,429.64	-1,100.44	-625.51	1,265.73	0.45	0.36	-15.86	
7,730.00	0.86	85.90	7,524.63	-1,101.26	-624.39	1,265.88	1.23	-0.32	-72.45	
7,826.00	0.41	335.02	7,620.63	-1,100.90	-623.81	1,265.27	1.12	-0.47	-115.50	
7,921.00	0.38	294.67	7,715.62	-1,100.46	-624.24	1,265.11	0.29	-0.03	-42.47	
8,016.00	0.35	322.35	7,810.62	-1,100.09	-624.71	1,265.03	0.19	-0.03	29.14	
8,111.00	0.34	321.55	7,905.62	-1,099.64	-625.06	1,264.82	0.01	-0.01	-0.84	
8,207.00	0.36	161.70	8,001.62	-1,099.71	-625.14	1,264.91	0.72	0.02	-166.51	
8,302.00	0.97	143.93	8,096.61	-1,100.64	-624.57	1,265.44	0.67	0.64	-18.71	
8,397.00	1.06	146.92	8,191.60	-1,102.03	-623.62	1,266.15	0.11	0.09	3.15	
8,493.00	1.24	153.34	8,287.58	-1,103.70	-622.67	1,267.12	0.23	0.19	6.69	
8,588.00	1.24	147.04	8,382.56	-1,105.48	-621.65	1,268.15	0.14	0.00	-6.63	
8,683.00	0.99	150.26	8,477.54	-1,107.06	-620.68	1,269.03	0.27	-0.26	3.39	



Survey Report



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well NBU 1022-4J4BS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	TVD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Site:	NBU 1022-4H PAD	MD Reference:	GL 5057 & KB 18 @ 5075.00ft (SST 57)
Well:	NBU 1022-4J4BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Denver Sales

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,778.00	1.14	136.59	8,572.52	-1,108.45	-619.63	1,269.70	0.31	0.16	-14.39	
8,873.00	1.21	138.26	8,667.50	-1,109.89	-618.31	1,270.28	0.08	0.07	1.76	
8,968.00	1.67	144.81	8,762.47	-1,111.77	-616.84	1,271.17	0.51	0.48	6.89	
9,031.00	2.02	134.18	8,825.44	-1,113.29	-615.52	1,271.82	0.77	0.56	-16.87	
LAST SDI MWD PRODUCTION SURVEY										
9,087.00	2.02	134.18	8,881.40	-1,114.67	-614.10	1,272.30	0.00	0.00	0.00	
SDI PROJECTION TO TD										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
173.00	173.00	0.01	0.86	FIRST SDI MWD SURFACE SURVEY	
2,310.00	2,246.79	-382.15	-222.17	LAST SDI MWD SURFACE SURVEY	
2,397.00	2,328.13	-410.53	-234.26	FIRST SDI MWD PRODUCTION SURVEY	
9,031.00	8,825.44	-1,113.29	-615.52	LAST SDI MWD PRODUCTION SURVEY	
9,087.00	8,881.40	-1,114.67	-614.10	SDI PROJECTION TO TD	

Checked By: _____ Approved By: _____ Date: _____

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 1022-4J4BS BLUE		Spud date: 1/29/2015	
Project: UTAH-UINTAH		Site: NBU 1022-4H PAD	Rig name no.: MILES 2/2
Event: COMPLETION		Start date: 6/11/2015	End date: 7/21/2015
Active datum: RKB @5,075.00usft (above Mean Sea Level)		UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
5/12/2015	-							
6/11/2015	9:00 - 13:00	4.00	SUBSPR	52	A	P		0 PSI ON SURFACE CSG. FILL SURFACE W/ 2 BBLS BRINE MIRU CAMERON TEST TRUCK PRESSURE TEST CSG & FRAC VALVES TO 7045 PSI, LOST 58 PSI IN 15 MIN, NO COMMUNICATION OR MIGRATION WITH SURFACE CSG, BLEED OFF PSI. TEST SURFACE CSG TO 540 PSI, LOST 520 PSI IN 5 MIN.
7/9/2015	7:00 - 7:15	0.25	SUBSPR	48		P		HSM-JSA
	7:15 - 13:00	5.75	SUBSPR	37	E	P		MIRU CASED HOLE SOLUTIONS PERF STG #1 AS DESIGNED, SWI.
7/13/2015	6:30 - 6:45	0.25	FRAC	48		P		HSM, SLIPS, TRIPS & FALLS, EYES & MIND ON TASK, RUSHING
	6:45 -	0.00	FRAC	36	E	P		MIRU, P/T LINES TO 8300 PSI FOR 15 MIN, LOST 140 PSI FRAC STG # 1) WHP 744 PSI, BRK 3967 PSI @ 2.7 BPM. ISIP 2550 PSI, FG. 0.72 ISIP 2680 PSI, FG. 0.74, NPI 130 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 2 AS PER DESIGN FRAC STG # 2) WHP 600 PSI, BRK 2964 PSI @ 3.1 BPM. ISIP 2300 PSI, FG. 0.7 ISIP 2630 PSI, FG. 0.74, NPI 330 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 3 AS PER DESIGN FRAC STG # 3) WHP 839 PSI, BRK 2993 PSI @ 3.2 BPM. ISIP 2140 PSI, FG. 0.69 ISIP 2465 PSI, FG. 0.73, NPI 325 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 4 AS PER DESIGN SDFN
7/14/2015	6:30 - 6:45	0.25	FRAC	48		P		HSM, SLIPS, TRIPS & FALLS, RUSHING,

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE		Spud date: 1/29/2015	
Project: UTAH-UINTAH		Site: NBU 1022-4H PAD	Rig name no.: MILES 2/2
Event: COMPLETION		Start date: 6/11/2015	End date: 7/21/2015
Active datum: RKB @5,075.00usft (above Mean Sea Level)		UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	6:45 - 15:30	8.75	FRAC	36	E	P		FRAC STG # 4) WHP 1700 PSI, BRK 2249 PSI @ 2.7 BPM. ISIP 1900 PSI, FG. 0.67 ISIP 2140 PSI, FG. 0.7, NPI 240 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 5 AS PER DESIGN FRAC STG # 5) START FRAC LOST CLUTCH ON BLENDER
	15:30 - 16:00	0.50	FRAC	46	E	Z		REPAIR CLUTCH ON BLENDER, NEED PARTS SDFN
7/15/2015	7:00 - 7:15	0.25	FRAC	48		P		HSM, SLIPS, TRIPS & FALLS, FRUSTRATION, RUSHING, EYES & MIND ON TASK
	7:15 - 18:00	10.75	FRAC	36	E	P		FRAC STG # 5) WHP 1750 PSI, BRK 2030 PSI @ 3.9 BPM. ISIP 1785 PSI, FG. 0.66 ISIP 2410 PSI, FG. 0.74, NPI 625 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 6 AS PER DESIGN FRAC STG # 6) WHP 750 PSI, BRK 3578 PSI @ 2.7 BPM. ISIP 2275 PSI, FG. 0.73 ISIP 2243 PSI, FG. 0.73, NPI -32 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 7 AS PER DESIGN FRAC STG # 7) WHP 660 PSI, BRK 2132 PSI @ 4.4 BPM. ISIP 1860 PSI, FG. 0.69 ISIP 2560 PSI, FG. 0.78, NPI 700 PSI. X/O TO W/L SET HAL 8K CBP & PERF STG # 8 AS PER DESIGN FRAC STG # 8) WHP 380 PSI, BRK 2030 PSI @ 3.5 BPM. ISIP 1225 PSI, FG. 0.61 ISIP 2215 PSI, FG. 0.74, NPI 990 PSI. SET KILL PLUG AS PER DESIGN TOTAL WATER PUMPED: 11729 BBLS TOTAL SAND PUMPED: 249861# SCALE: 221 GAL BIO: 148 GAL
7/20/2015	7:00 - 7:30	0.50	DRLOUT	48		P		HS, PICKING UP TBG W/ PIPE WRANGLER.
	7:00 - 10:30	3.50	DRLOUT	30	A	P		RIG DOWN OFF RED WELL, MOVED OVER & RIGGED UP, ND WH NU BOPS, RU FLOOR & TBG EQUIP.
	10:30 - 15:00	4.50	DRLOUT	31	I	P		TALLY & PU 37/8 BIT, POBS & 220 JTS 23/8 P-110, TAGGED UP @ 6977', RU DRLG EQUIP FILL HOLE & TEST BOPS TO 3,000 PSI OK, PREP TO D/O IN AM SWI SDFN.
7/21/2015	7:00 - 7:30	0.50	DRLOUT	48		P		HSM, DRILLING PLUGS.

US ROCKIES REGION
Operation Summary Report

Well: NBU 1022-4J4BS BLUE		Spud date: 1/29/2015	
Project: UTAH-UINTAH	Site: NBU 1022-4H PAD	Rig name no.: MILES 2/2	
Event: COMPLETION	Start date: 6/11/2015	End date: 7/21/2015	
Active datum: RKB @5,075.00usft (above Mean Sea Level)		UWI: SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	7:30 - 15:00	7.50	DRLOUT	44	C	P		2 OF 4, BROKE CIRC CONV, RIH. C/O 10' SAND TAG 1ST PLUG @ 6982' DRL PLG IN 5 MIN, 200 PSI INCREASE RIH. C/O 20' SAND TAG 2ND PLUG @ 7212' DRL PLG IN 5 MIN, 300 PSI INCREASE RIH. C/O 10' SAND TAG 3RD PLUG @ 7492' DRL PLG IN 10 MIN, 400 PSI INCREASE RIH. C/O 60' SAND TAG 4TH PLUG @ 7731' DRL PLG IN 5 MIN, 600 PSI INCREASE RIH. C/O 15' SAND TAG 5TH PLUG @ 7935' DRL PLG IN 8 MIN, 500 PSI INCREASE RIH. C/O 20' SAND TAG 6TH PLUG @ 8211' DRL PLG IN 5 MIN, 200 PSI INCREASE RIH. C/O 30' SAND TAG 7TH PLUG @ 8489' DRL PLG IN 15 MIN, 500 PSI INCREASE RIH. C/O 20' SAND TAG 8TH PLUG @ 8680' DRL PLG IN 10 MIN, 600 PSI INCREASE RIH. C/O TO 9016', CIRC CLN, RD SWIVEL, L/D 18 JTS, LAND TBG, ND BOPS NU WH, TEST FL, PUMPED OFF BIT, TURN WELL TO FB CREW.RIGGED DWN MOVED OVER & RIGGED UP ON NBU 1022-4J1CS YELLOW WELL 3 OF 4,ND WH NU BOPS. SDFN. KB = 18' 41/16 HANGER = .83' (SURFACE OPEN & LOCKED) 266 JTS 23/8 p-110 = 8449.53' (SICP 1800) POBS W/ 1.875 X/N = 2.20' EOT @ 8470.56' TWTR = 11,729 BBLS TWR = 1100 BBLS TWLTR = 10,629 BBLS 314 JT HAULED OUT, P-110. 266 LANDED 48 TO RETURN TO SAMEULS YARD
	15:00 - 15:00	0.00	DRLOUT	50				WELL ON SALES @ 8:45 HR ON 7/21/2015 - 950 MCFD, FCP 1880#, FTP 1603#, 1920 BWPD, 18/64 CK.

1 General**1.1 Customer Information**

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	NBU 1022-4J4BS BLUE	Wellbore No.	OH
Well Name	NBU 1022-4J4BS	Wellbore Name	NBU 1022-4J4BS
Report no.	1	Report date	7/7/2015
Project	UTAH-UINTAH	Site	NBU 1022-4H PAD
Rig Name/No.		Event	COMPLETION
Start date	6/11/2015	End date	7/21/2015
Spud date	1/29/2015	Active datum	RKB @5,075.00usft (above Mean Sea Level)
UWI	SE/NE/0/10/S/22/E/4/0/0/26/PM/N/2419/E/0/1181/0/0		

1.3 General

Contractor		Job method		Supervisor	
Perforated Assembly		Conveyed method			

1.4 Initial Conditions

Fluid type		Fluid density	
Surface press.		Estimate res press	
TVD fluid top		Fluid head	
Hydrostatic press.		Press. difference	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	7,032.0 (usft)-8,973.0 (usft)	Start Date/Time	7/7/2015 12:00AM
No. of intervals	57	End Date/Time	7/7/2015 12:00AM
Total shots	192	Net perforation interval	64.00 (usft)
Avg. shot density	3.00 (shot/ft)	Final surface pressure	
		Final press. date	

2 Intervals**2.1 Perforated Interval**

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD top (usft)	MD base (usft)	Shot density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr type /Stage No	Carr size (in)	Phasing (°)	Charge desc. /Charge manufacturer	Charge weight (gram)	Reason	Misrun	How Guns Conveyed
7/7/2015 12:00AM	M E S A VERDE/			7,032.0	7,033.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD top (usft)	MD base (usft)	Shot density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr type /Stage No	Carr size (in)	Phasing (°)	Charge desc. /Charge manufacturer	Charge weight (gram)	Reason	Misrun	How Guns Conveyed
7/7/2015 12:00AM	M E S A VERDE/			7,082.0	7,083.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,100.0	7,101.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,140.0	7,141.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,175.0	7,177.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,195.0	7,197.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,263.0	7,264.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,290.0	7,291.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,322.0	7,324.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,356.0	7,358.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,470.0	7,472.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,516.0	7,517.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,527.0	7,528.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,592.0	7,593.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,627.0	7,628.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,653.0	7,654.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,668.0	7,669.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,714.0	7,716.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,748.0	7,749.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,764.0	7,765.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,775.0	7,776.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,788.0	7,789.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,805.0	7,806.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD top (usft)	MD base (usft)	Shot density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr type /Stage No	Carr size (in)	Phasing (°)	Charge desc. /Charge manufacturer	Charge weight (gram)	Reason	Misrun	How Guns Conveyed
7/7/2015 12:00AM	M E S A VERDE/			7,859.0	7,860.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,878.0	7,879.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,919.0	7,920.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,953.0	7,954.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			7,978.0	7,979.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,009.0	8,010.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,038.0	8,039.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,079.0	8,080.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,135.0	8,136.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,168.0	8,169.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,190.0	8,191.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,236.0	8,237.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,267.0	8,268.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,295.0	8,296.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,359.0	8,360.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,378.0	8,379.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,411.0	8,412.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,436.0	8,437.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,458.0	8,459.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,511.0	8,512.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,537.0	8,538.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,563.0	8,564.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD top (usft)	MD base (usft)	Shot density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr type /Stage No	Carr size (in)	Phasing (°)	Charge desc. /Charge manufacturer	Charge weight (gram)	Reason	Misrun	How Guns Conveyed
7/7/2015 12:00AM	M E S A VERDE/			8,587.0	8,588.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,628.0	8,629.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,636.0	8,637.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,648.0	8,650.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,692.0	8,693.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,710.0	8,711.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,724.0	8,725.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,759.0	8,760.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,770.0	8,771.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,809.0	8,810.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,834.0	8,835.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		
7/7/2015 12:00AM	M E S A VERDE/			8,972.0	8,973.0	3.00		0.410	EXP/	3.125	120.00		19.00	PRODUCTION		

3 Plots

3.1 Wellbore Schematic

