

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM-APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use form 3160-3 (APD) for such proposals.Bureau No.
NMINM0245247

If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other Instructions on page 2

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

EK 30 BS2 FEDERAL COM 4H

2. Name of Operator

MCELVAIN OIL & GAS PROP INC

Contact: TONY G COOPER

E-Mail: tony.cooper@mcelvain.com

9. API Well No.

30-025-43151-00-X1

3a. Address

1050 17TH STREET SUITE 1800
DENVER, CO 80265-1801

3b. Phone No. (include area code)

Ph: 303-893-0933 Ext: 331

10. Field and Pool or Exploratory Area

EK-BONE SPRING

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 30 T18S R34E Lot 4 80FSL 1050FWL

11. County or Parish, State

LEA COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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

McElvain is respectfully requesting the following changes to this previously approved APD.

Old SHL - 80' FSL, 1050' FWL
New SHL - 30' FSL, 1050' FWL
Old BHL - 2440' FSL 660' FWL
New BHL - 2539' FSL 660' FWL
TMD 17,604 (Including RH)

Revised C-102 and Directional Plan attached.

Engineering OK
Approved JAC 08/01/19 DOT-BLM-NM-PO20-246-1127-EASome
stipulations Apply

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #443860 verified by the BLM Well Information System

For MCELVAIN OIL & GAS PROP INC, sent to the Hobbs

Committed to AFMSS for processing by PRISCILLA PEREZ on 11/15/2018 (19PP0428SE)

Name (Printed/Typed) TONY G COOPER

Title SR EHS SPECIALIST

Signature

(Electronic Submission)

Date 11/13/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

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

Office

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.

(Instructions on page 2)

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240
Phone (505) 593-6101 Fax: (505) 393-0720

DISTRICT II

811 S. First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-0720

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 534-6178 Fax: (505) 534-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-43151	Pool Code 21650	Pool Name E-K; BONE SPRING
Property Code 315044	Property Name EK 30 BS2 FEDERAL COM	Well Number 4H
OGRID No. 22044	Operator Name McELVAIN ENERGY, INC	Elevation 3862'

Surface Location

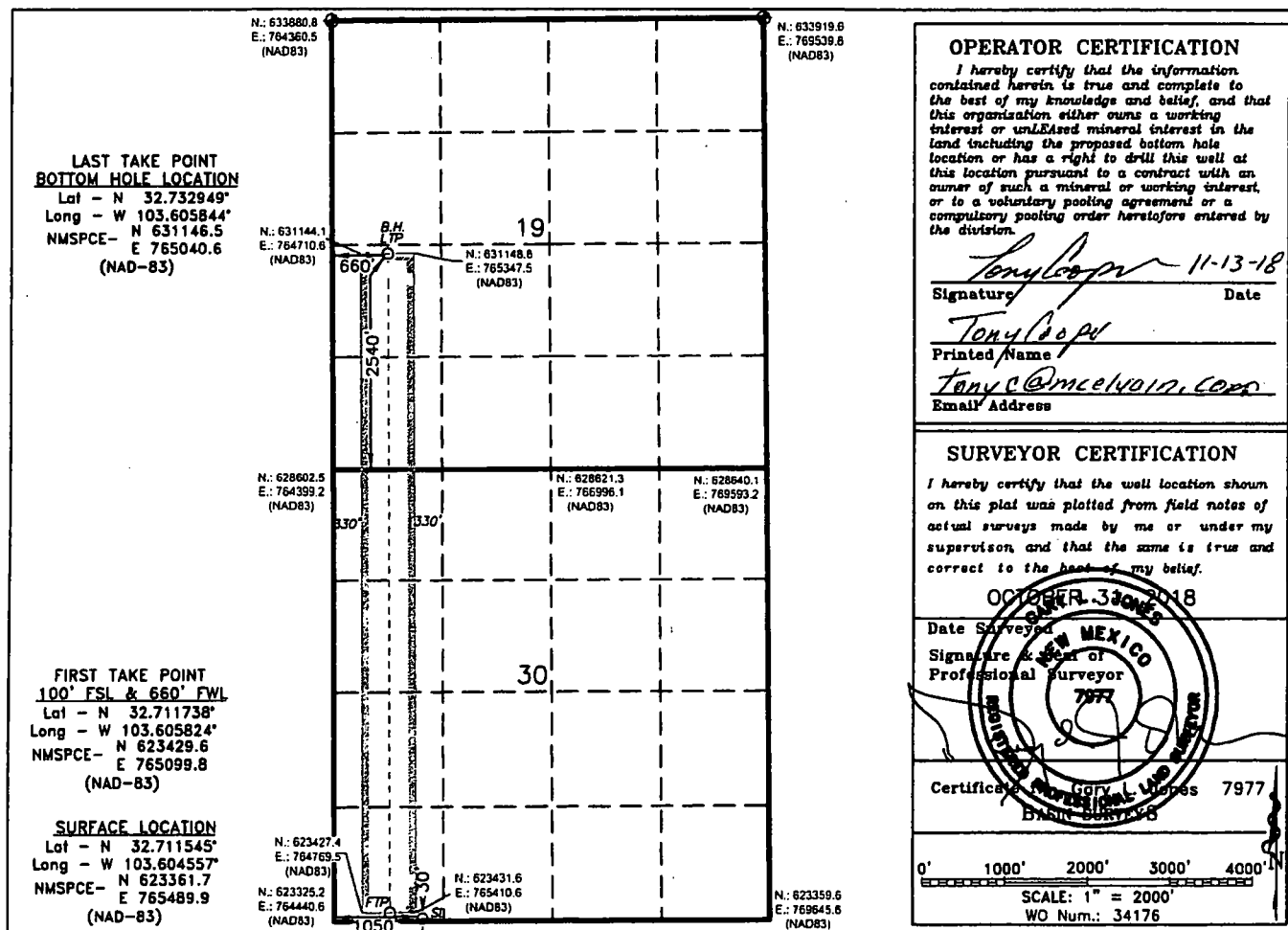
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	30	18 S	34 E		30	SOUTH	1050	WEST	LEA

Bottom Hole Location If Different From Surface

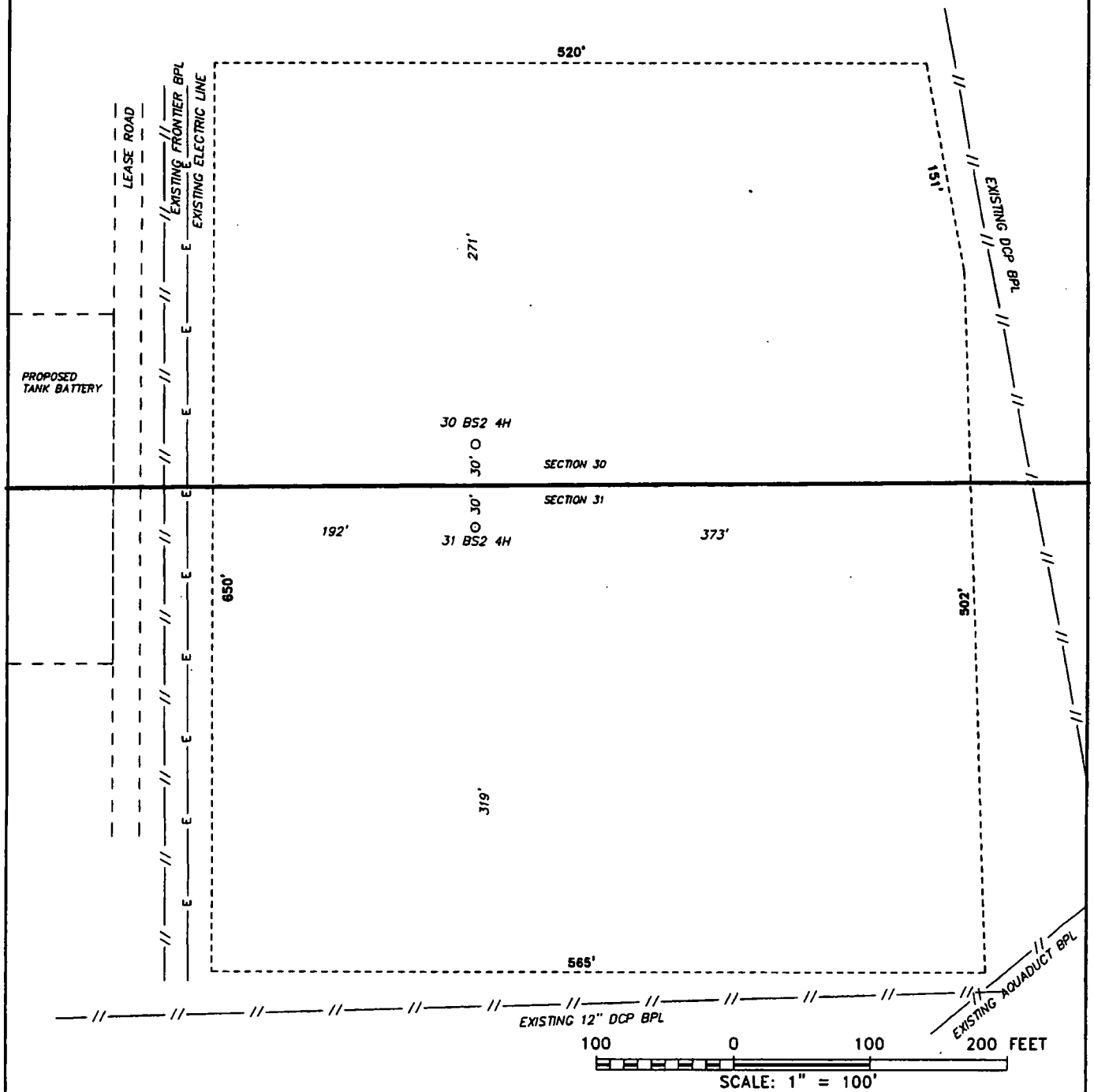
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	19	18 S	34 E		2539	SOUTH	660	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**SECTIONS 30&31, TOWNSHIP 18 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



McELVAIN ENERGY, INC

REF: EK 30 BS2 FEDERAL COM 4H / WELL PAD TOPO

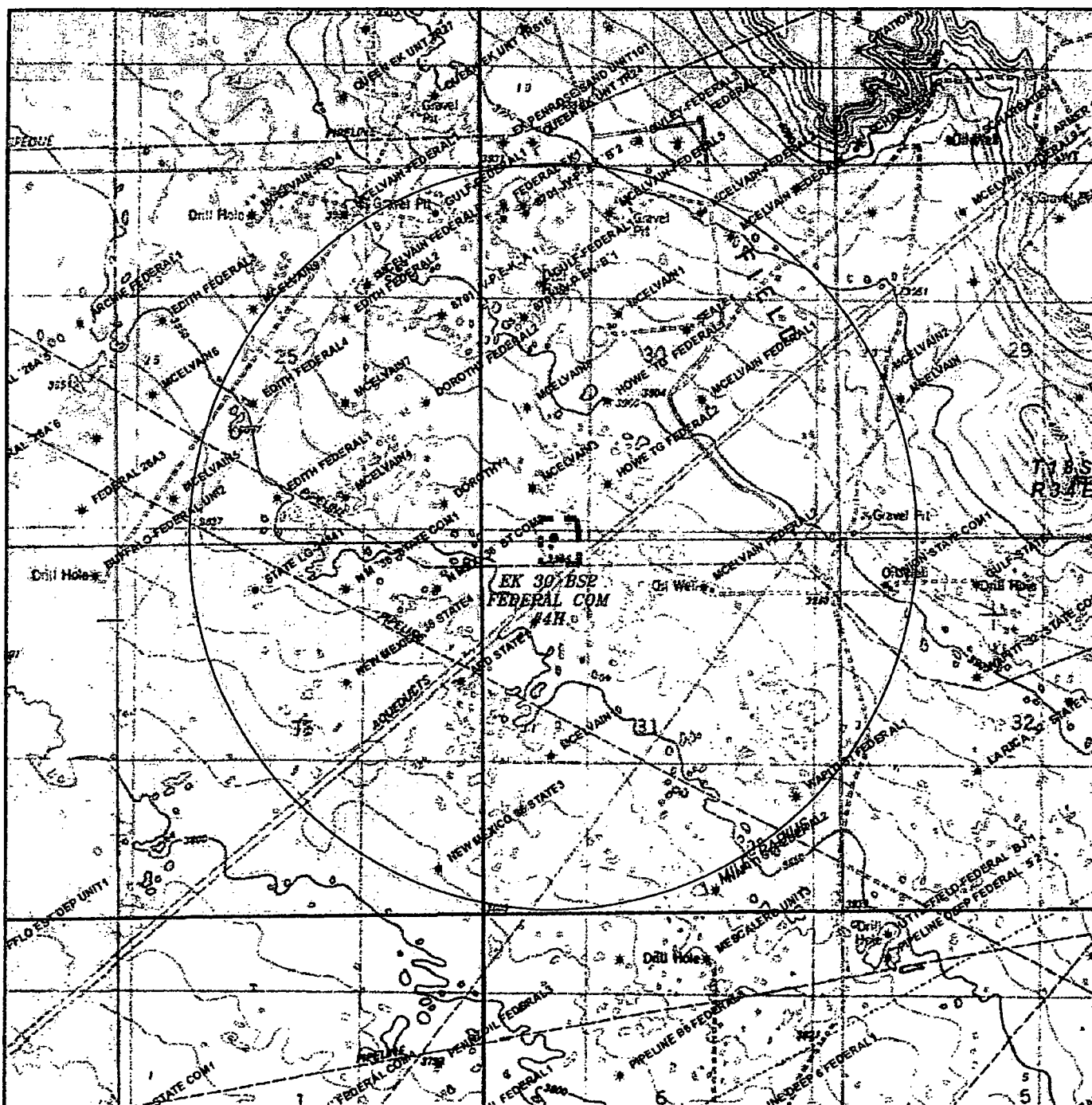
THE EK 30 BS2 FEDERAL COM 4H LOCATED 30' FROM
THE SOUTH LINE AND 1050' FROM THE WEST LINE OF
SECTION 30, TOWNSHIP 18 SOUTH, RANGE 34 EAST.

N.M.P.M., LEA COUNTY, NEW MEXICO.

**basin
surveys**
focused on excellence
in the oilfield

P.O. Box 1786 (575) 393-7316 - Office
1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basin-surveys.com

W.O. Number: 34176 Drawn By: K. GOAD Date: 11-02-2018 Survey Date: 10-31-2018 Sheet 1 of 1 Sheets



EK 30 BS2 FEDERAL COM 4H
 Located 30' FSL and 1050' FWL
 Section 30, Township 18 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.

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 basinsurveys.com

0' 1000' 2000' 3000' 4000'

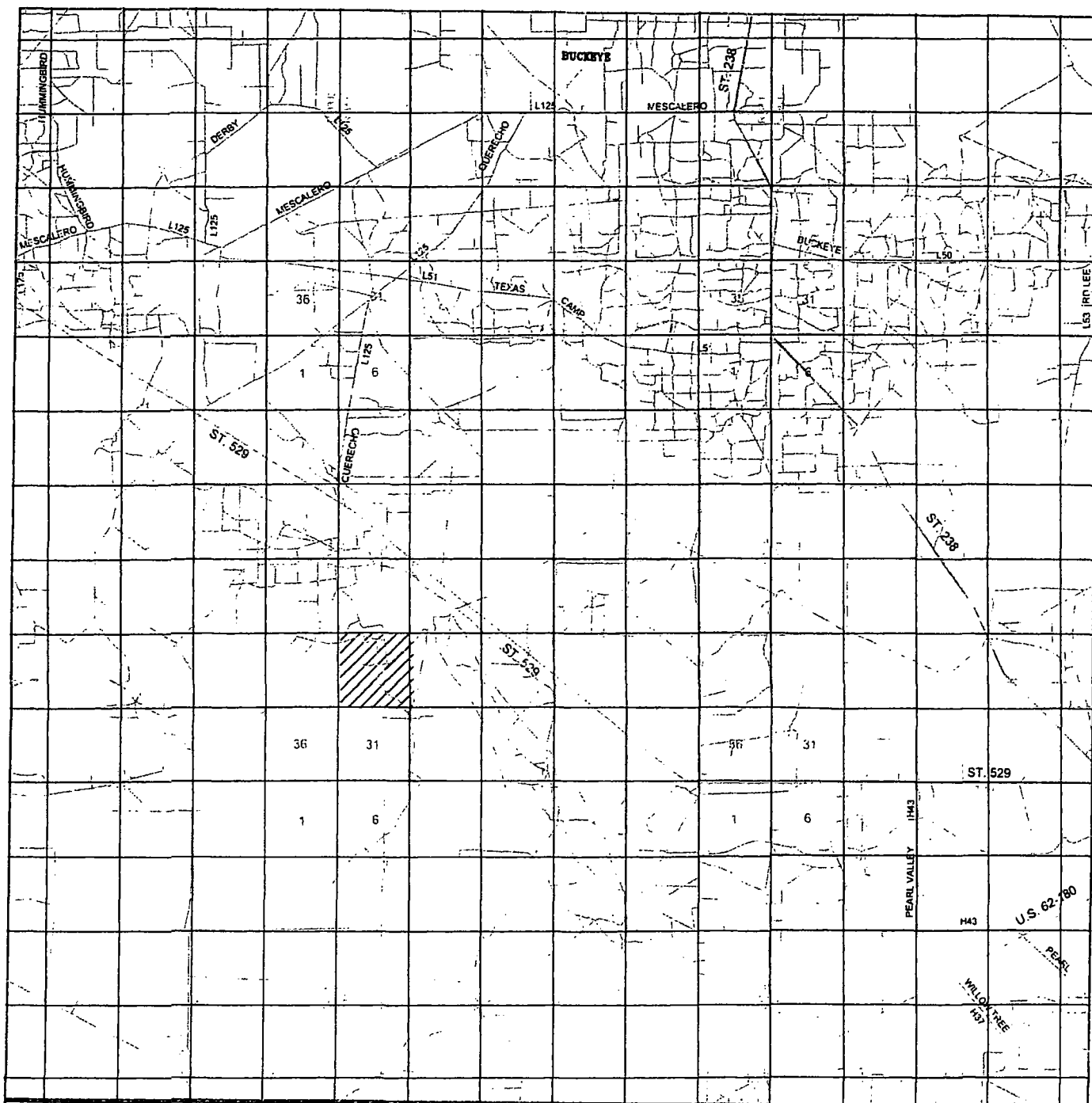
SCALE: 1" = 2000'

W.O. Number: KJG 34176

Survey Date: 10-31-2018

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND

McELVAIN
ENERGY, INC



EK 30 BS2 FEDERAL COM 4H
 Located 30' FSL and 1050' FWL
 Section 30, Township 18 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.



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0 1 MI 2 MI 3 MI 4 MI

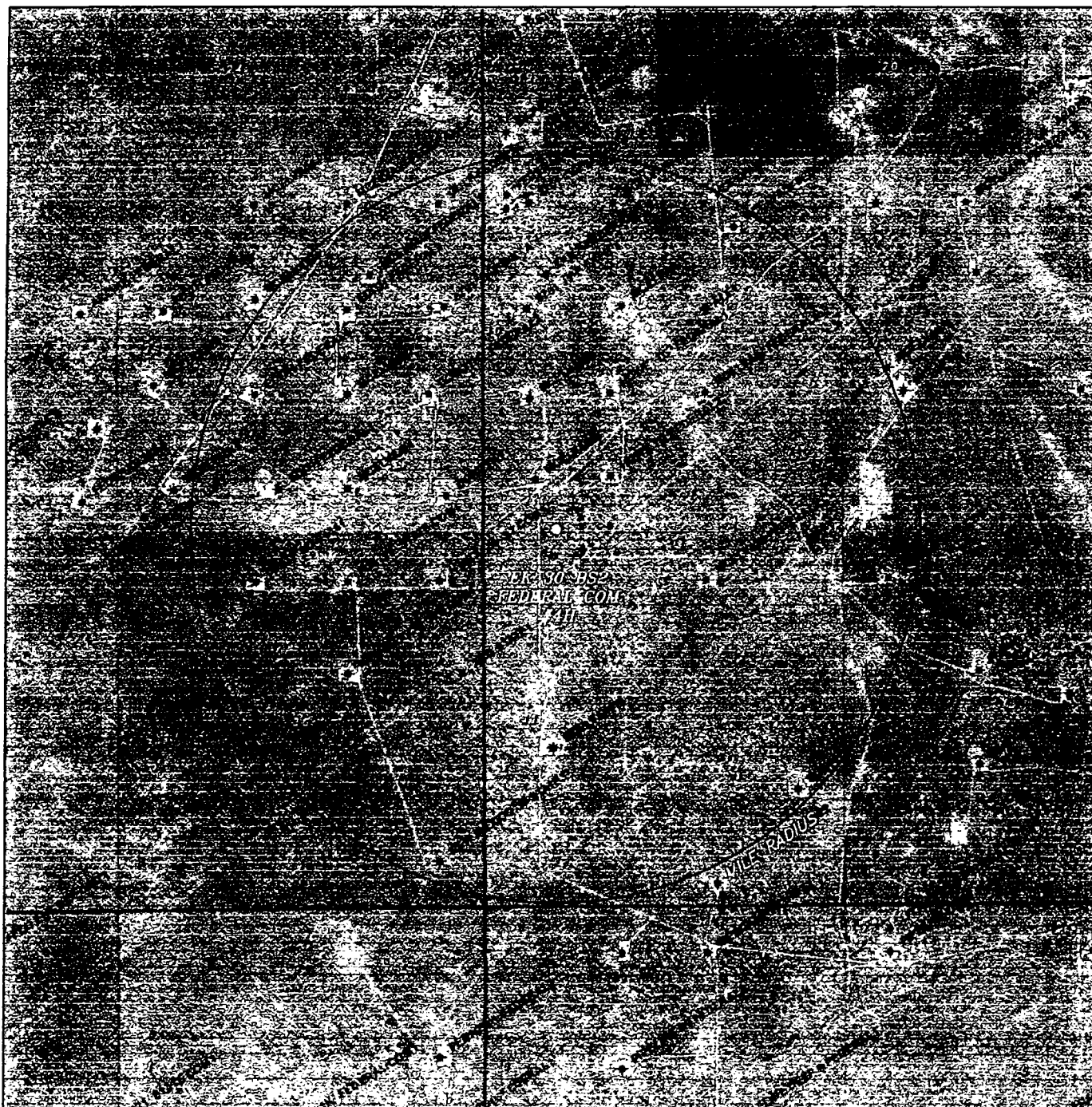
SCALE: 1" = 2 MILES

W.O. Number: KJG 34176

Survey Date: 10-31-2018

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND

McELVAIN
 ENERGY, INC



EK 30 BS2 FEDERAL COM 4H
 Located 30' FSL and 1050' FWL
 Section 30, Township 18 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.



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 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basinsurveys.com

0'	1000'	2000'	3000'	4000'
SCALE: 1" = 2000'				
W.O. Number KJG 34176				
Survey Date: 10-31-2018				
YELLOW TINT - USA LAND				
BLUE TINT - STATE LAND				
NATURAL COLOR - FEE LAND				

**McELVAIN
 ENERGY, INC**



McElvain Energy, Inc.

Sec. 30 T18S R34E

EK 30 WCD Federal Com

EK 30 BS2 Federal Com 4H

Wellbore #1

Plan: Plan #7 07Nov18 kjs

Standard Planning Report - Geographic

07 November, 2018



Planning Report - Geographic

Database: EDM 5000.15 Single User Db
 Company: McElvain Energy, Inc.
 Project: Sec. 30 T18S R34E
 Site: EK 30 WCD Federal Com
 Well: EK 30 BS2 Federal Com 4H
 Wellbore: Wellbore #1
 Design: Plan #7 07Nov18 kjs

Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
 TVD Reference: KB2 @ 3883.00usft
 MD Reference: KB2 @ 3883.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project	Sec. 30 T18S R34E, Lea County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	EK 30 WCD Federal Com			
Site Position:		Northing:	626,476.830 usft	Latitude: 32.720115
From:	Map	Easting:	765,038.760 usft	Longitude: -103.605955
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.39 °

Well	EK 30 BS2 Federal Com 4H			
Well Position	+N/-S	0.00 usft	Northing:	623,361.700 usft
	+E/-W	0.00 usft	Easting:	765,489.900 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level: 3,862.00 usft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/29/2015	7.13	60.53	48,489.33968000

Design	Plan #7 07Nov18 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	358.67

Plan Survey Tool Program Date 11/7/2018

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,604.47 Plan #7 07Nov18 kjs (Wellbore #	MWD	
			MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,119.99	3.30	269.17	2,119.86	-0.09	-6.33	1.50	1.50	0.00	269.17	
9,462.59	3.30	269.17	9,450.30	-6.21	-428.93	0.00	0.00	0.00	0.00	
10,071.73	73.02	0.00	9,907.00	332.00	-449.30	12.00	11.45	14.91	91.83	
10,226.62	91.61	0.00	9,927.63	484.82	-449.30	12.00	12.00	0.00	0.00	
17,529.47	91.61	0.00	9,722.65	7,784.80	-449.30	0.00	0.00	0.00	0.00	TD / PBHL 30 BS2 4H
17,604.47	91.61	0.00	9,720.55	7,859.77	-449.30	0.00	0.00	0.00	0.00	



Planning Report - Geographic

Database: EDM 5000.15 Single User Db
Company: McElvain Energy, Inc.
Project: Sec. 30 T18S R34E
Site: EK 30 WCD Federal Com
Well: EK 30 BS2 Federal Com 4H
Wellbore: Wellbore #1
Design: Plan #7 07Nov18 kjs

Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
TVD Reference: KB2 @ 3883.00usft
MD Reference: KB2 @ 3883.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
100.00	0.00	0.00	100.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
200.00	0.00	0.00	200.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
300.00	0.00	0.00	300.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
400.00	0.00	0.00	400.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
500.00	0.00	0.00	500.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
600.00	0.00	0.00	600.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
700.00	0.00	0.00	700.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
800.00	0.00	0.00	800.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
900.00	0.00	0.00	900.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,000.00	0.00	0.00	1,000.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,100.00	0.00	0.00	1,100.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,200.00	0.00	0.00	1,200.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,300.00	0.00	0.00	1,300.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,400.00	0.00	0.00	1,400.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,500.00	0.00	0.00	1,500.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,600.00	0.00	0.00	1,600.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,681.00	0.00	0.00	1,681.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
Rustler									
1,700.00	0.00	0.00	1,700.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
1,741.00	0.00	0.00	1,741.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
Salt									
1,800.00	0.00	0.00	1,800.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
13 3/8"									
1,900.00	0.00	0.00	1,900.00	0.00	0.00	623,361.700	765,489.900	32.711545	-103.604557
Start Build 1.50									
2,000.00	1.50	269.17	1,999.99	-0.02	-1.31	623,361.681	765,488.591	32.711545	-103.604562
2,100.00	3.00	269.17	2,099.91	-0.08	-5.23	623,361.625	765,484.665	32.711544	-103.604574
2,119.99	3.30	269.17	2,119.87	-0.09	-6.33	623,361.609	765,483.567	32.711544	-103.604578
Hold 3.30 Inc, 269.17 Az									
2,200.00	3.30	269.17	2,199.75	-0.16	-10.94	623,361.542	765,478.962	32.711544	-103.604593
2,300.00	3.30	269.17	2,299.58	-0.24	-16.69	623,361.459	765,473.207	32.711544	-103.604612
2,400.00	3.30	269.17	2,399.41	-0.32	-22.45	623,361.376	765,467.451	32.711544	-103.604630
2,500.00	3.30	269.17	2,499.25	-0.41	-28.20	623,361.292	765,461.696	32.711544	-103.604649
2,600.00	3.30	269.17	2,599.08	-0.49	-33.96	623,361.209	765,455.941	32.711544	-103.604668
2,700.00	3.30	269.17	2,698.92	-0.57	-39.71	623,361.126	765,450.185	32.711544	-103.604687
2,800.00	3.30	269.17	2,798.75	-0.66	-45.47	623,361.043	765,444.430	32.711544	-103.604705
2,900.00	3.30	269.17	2,898.59	-0.74	-51.23	623,360.959	765,438.674	32.711544	-103.604724
3,000.00	3.30	269.17	2,998.42	-0.82	-56.98	623,360.876	765,432.919	32.711543	-103.604743
3,100.00	3.30	269.17	3,098.25	-0.91	-62.74	623,360.793	765,427.163	32.711543	-103.604761
3,200.00	3.30	269.17	3,198.09	-0.99	-68.49	623,360.709	765,421.408	32.711543	-103.604780
3,258.04	3.30	269.17	3,256.03	-1.04	-71.83	623,360.661	765,418.068	32.711543	-103.604791
Yates									
3,300.00	3.30	269.17	3,297.92	-1.07	-74.25	623,360.626	765,415.653	32.711543	-103.604799
3,400.00	3.30	269.17	3,397.76	-1.16	-80.00	623,360.543	765,409.897	32.711543	-103.604818
3,402.25	3.30	269.17	3,400.00	-1.16	-80.13	623,360.541	765,409.768	32.711543	-103.604818
9 5/8"									
3,500.00	3.30	269.17	3,497.59	-1.24	-85.76	623,360.460	765,404.142	32.711543	-103.604836
3,600.00	3.30	269.17	3,597.42	-1.32	-91.51	623,360.376	765,398.386	32.711543	-103.604855
3,700.00	3.30	269.17	3,697.26	-1.41	-97.27	623,360.293	765,392.631	32.711543	-103.604874
3,733.84	3.30	269.17	3,731.04	-1.44	-99.22	623,360.265	765,390.683	32.711543	-103.604880
Seven Rivers									
3,800.00	3.30	269.17	3,797.09	-1.49	-103.02	623,360.210	765,386.876	32.711542	-103.604892
3,900.00	3.30	269.17	3,896.93	-1.57	-108.78	623,360.127	765,381.120	32.711542	-103.604911



Planning Report - Geographic

Database: EDM 5000.15 Single User Db
 Company: McElvain Energy, Inc.
 Project: Sec. 30 T18S R34E
 Site: EK 30 WCD Federal Com
 Well: EK 30 BS2 Federal Com 4H
 Wellbore: Wellbore #1
 Design: Plan #7 07Nov18 kjs

Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
 TVD Reference: KB2 @ 3883.00usft
 MD Reference: KB2 @ 3883.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,000.00	3.30	269.17	3,996.76	-1.66	-114.53	623,360.043	765,375.365	32.711542	-103.604930
4,100.00	3.30	269.17	4,096.60	-1.74	-120.29	623,359.960	765,369.609	32.711542	-103.604949
4,200.00	3.30	269.17	4,196.43	-1.82	-126.05	623,359.877	765,363.854	32.711542	-103.604967
4,300.00	3.30	269.17	4,296.26	-1.91	-131.80	623,359.794	765,358.098	32.711542	-103.604986
4,400.00	3.30	269.17	4,396.10	-1.99	-137.56	623,359.710	765,352.343	32.711542	-103.605005
4,435.02	3.30	269.17	4,431.06	-2.02	-139.57	623,359.681	765,350.328	32.711542	-103.605011
Queen									
4,500.00	3.30	269.17	4,495.93	-2.07	-143.31	623,359.627	765,346.588	32.711542	-103.605023
4,600.00	3.30	269.17	4,595.77	-2.16	-149.07	623,359.544	765,340.832	32.711541	-103.605042
4,700.00	3.30	269.17	4,695.60	-2.24	-154.82	623,359.460	765,335.077	32.711541	-103.605061
4,710.48	3.30	269.17	4,706.06	-2.25	-155.43	623,359.452	765,334.474	32.711541	-103.605063
Penrose									
4,800.00	3.30	269.17	4,795.44	-2.32	-160.58	623,359.377	765,329.321	32.711541	-103.605080
4,900.00	3.30	269.17	4,895.27	-2.41	-166.33	623,359.294	765,323.566	32.711541	-103.605098
5,000.00	3.30	269.17	4,995.10	-2.49	-172.09	623,359.211	765,317.811	32.711541	-103.605117
5,100.00	3.30	269.17	5,094.94	-2.57	-177.84	623,359.127	765,312.055	32.711541	-103.605136
5,200.00	3.30	269.17	5,194.77	-2.66	-183.60	623,359.044	765,306.300	32.711541	-103.605154
5,261.41	3.30	269.17	5,256.08	-2.71	-187.13	623,358.993	765,302.766	32.711541	-103.605166
San Andres									
5,300.00	3.30	269.17	5,294.61	-2.74	-189.36	623,358.961	765,300.544	32.711541	-103.605173
5,400.00	3.30	269.17	5,394.44	-2.82	-195.11	623,358.878	765,294.789	32.711541	-103.605192
5,411.66	3.30	269.17	5,406.08	-2.83	-195.78	623,358.868	765,294.118	32.711540	-103.605194
Delaware									
5,451.73	3.30	269.17	5,446.08	-2.87	-198.09	623,358.835	765,291.812	32.711540	-103.605202
1st Delaware Sand									
5,500.00	3.30	269.17	5,494.27	-2.91	-200.87	623,358.794	765,289.033	32.711540	-103.605211
5,600.00	3.30	269.17	5,594.11	-2.99	-206.62	623,358.711	765,283.278	32.711540	-103.605229
5,700.00	3.30	269.17	5,693.94	-3.07	-212.38	623,358.628	765,277.523	32.711540	-103.605248
5,737.21	3.30	269.17	5,731.09	-3.10	-214.52	623,358.597	765,275.381	32.711540	-103.605255
2nd Delaware Sand									
5,800.00	3.30	269.17	5,793.78	-3.16	-218.13	623,358.544	765,271.767	32.711540	-103.605267
5,900.00	3.30	269.17	5,893.61	-3.24	-223.89	623,358.461	765,266.012	32.711540	-103.605285
6,000.00	3.30	269.17	5,993.45	-3.32	-229.64	623,358.378	765,260.256	32.711540	-103.605304
6,100.00	3.30	269.17	6,093.28	-3.41	-235.40	623,358.295	765,254.501	32.711540	-103.605323
6,200.00	3.30	269.17	6,193.11	-3.49	-241.15	623,358.211	765,248.746	32.711540	-103.605342
6,300.00	3.30	269.17	6,292.95	-3.57	-246.91	623,358.128	765,242.990	32.711539	-103.605360
6,400.00	3.30	269.17	6,392.78	-3.66	-252.66	623,358.045	765,237.235	32.711539	-103.605379
6,500.00	3.30	269.17	6,492.62	-3.74	-258.42	623,357.962	765,231.479	32.711539	-103.605398
6,600.00	3.30	269.17	6,592.45	-3.82	-264.18	623,357.878	765,225.724	32.711539	-103.605416
6,700.00	3.30	269.17	6,692.29	-3.91	-269.93	623,357.795	765,219.968	32.711539	-103.605435
6,800.00	3.30	269.17	6,792.12	-3.99	-275.69	623,357.712	765,214.213	32.711539	-103.605454
6,900.00	3.30	269.17	6,891.95	-4.07	-281.44	623,357.629	765,208.458	32.711539	-103.605473
7,000.00	3.30	269.17	6,991.79	-4.16	-287.20	623,357.545	765,202.702	32.711539	-103.605491
7,100.00	3.30	269.17	7,091.62	-4.24	-292.95	623,357.462	765,196.947	32.711538	-103.605510
7,200.00	3.30	269.17	7,191.46	-4.32	-298.71	623,357.379	765,191.191	32.711538	-103.605529
7,300.00	3.30	269.17	7,291.29	-4.40	-304.46	623,357.295	765,185.436	32.711538	-103.605547
7,400.00	3.30	269.17	7,391.12	-4.49	-310.22	623,357.212	765,179.681	32.711538	-103.605566
7,500.00	3.30	269.17	7,490.96	-4.57	-315.97	623,357.129	765,173.925	32.711538	-103.605585
7,600.00	3.30	269.17	7,590.79	-4.65	-321.73	623,357.046	765,168.170	32.711538	-103.605604
7,630.39	3.30	269.17	7,621.13	-4.68	-323.48	623,357.020	765,166.421	32.711538	-103.605609
Bone Spring									
7,700.00	3.30	269.17	7,690.63	-4.74	-327.49	623,356.962	765,162.414	32.711538	-103.605622
7,800.00	3.30	269.17	7,790.46	-4.82	-333.24	623,356.879	765,156.659	32.711538	-103.605641
7,900.00	3.30	269.17	7,890.30	-4.90	-339.00	623,356.796	765,150.903	32.711537	-103.605660



Planning Report - Geographic

Database: EDM 5000.15 Single User Db
Company: McElvain Energy, Inc.
Project: Sec. 30 T18S R34E
Site: EK 30 WCD Federal Com
Well: EK 30 BS2 Federal Com 4H
Wellbore: Wellbore #1
Design: Plan #7 07Nov18 kjs

Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
TVD Reference: KB2 @ 3883.00usft
MD Reference: KB2 @ 3883.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,000.00	3.30	269.17	7,990.13	-4.99	-344.75	623,356.713	765,145.148	32.711537	-103.605678
8,100.00	3.30	269.17	8,089.96	-5.07	-350.51	623,356.629	765,139.393	32.711537	-103.605697
8,200.00	3.30	269.17	8,189.80	-5.15	-356.26	623,356.546	765,133.637	32.711537	-103.605716
8,300.00	3.30	269.17	8,289.63	-5.24	-362.02	623,356.463	765,127.882	32.711537	-103.605735
8,400.00	3.30	269.17	8,389.47	-5.32	-367.77	623,356.380	765,122.126	32.711537	-103.605753
8,500.00	3.30	269.17	8,489.30	-5.40	-373.53	623,356.296	765,116.371	32.711537	-103.605772
8,600.00	3.30	269.17	8,589.13	-5.49	-379.28	623,356.213	765,110.616	32.711537	-103.605791
8,700.00	3.30	269.17	8,688.97	-5.57	-385.04	623,356.130	765,104.860	32.711537	-103.605809
8,800.00	3.30	269.17	8,788.80	-5.65	-390.79	623,356.046	765,099.105	32.711536	-103.605828
8,900.00	3.30	269.17	8,888.64	-5.74	-396.55	623,355.963	765,093.349	32.711536	-103.605847
8,967.64	3.30	269.17	8,956.16	-5.79	-400.44	623,355.907	765,089.457	32.711536	-103.605859
1st Bone Spring Sand									
9,000.00	3.30	269.17	8,988.47	-5.82	-402.31	623,355.880	765,087.594	32.711536	-103.605865
9,100.00	3.30	269.17	9,088.31	-5.90	-408.06	623,355.797	765,081.838	32.711536	-103.605884
9,200.00	3.30	269.17	9,188.14	-5.99	-413.82	623,355.713	765,076.083	32.711536	-103.605903
9,300.00	3.30	269.17	9,287.97	-6.07	-419.57	623,355.630	765,070.328	32.711536	-103.605922
9,400.00	3.30	269.17	9,387.81	-6.15	-425.33	623,355.547	765,064.572	32.711536	-103.605940
9,462.59	3.30	269.17	9,450.29	-6.21	-428.93	623,355.495	765,060.970	32.711536	-103.605952
KOP 12/100									
9,500.00	5.48	324.12	9,487.61	-4.77	-431.06	623,356.928	765,058.845	32.711540	-103.605959
9,518.59	7.39	334.62	9,506.08	-2.97	-432.09	623,358.728	765,057.811	32.711545	-103.605962
2nd Bone Spring Sand									
9,600.00	16.70	349.94	9,585.63	13.31	-436.39	623,375.015	765,053.514	32.711589	-103.605976
9,700.00	28.56	354.93	9,677.77	51.41	-441.03	623,413.113	765,048.873	32.711694	-103.605990
9,800.00	40.49	357.14	9,760.01	107.86	-444.77	623,469.557	765,045.127	32.711849	-103.606001
9,900.00	52.46	358.47	9,828.76	180.18	-447.46	623,541.880	765,042.437	32.712048	-103.606008
10,000.00	64.43	359.43	9,881.00	265.22	-448.98	623,626.922	765,040.923	32.712282	-103.606011
10,070.88	72.92	359.99	9,906.75	331.18	-449.30	623,692.882	765,040.600	32.712463	-103.606011
POP - TOP TARGET WINDOW									
10,071.73	73.02	0.00	9,907.00	332.00	-449.30	623,693.700	765,040.600	32.712466	-103.606011
10,100.00	76.41	0.00	9,914.45	359.26	-449.30	623,720.965	765,040.600	32.712540	-103.606010
10,200.00	88.41	0.00	9,927.63	458.21	-449.30	623,819.909	765,040.600	32.712812	-103.606008
10,213.87	90.08	0.00	9,927.81	472.07	-449.30	623,833.773	765,040.600	32.712851	-103.606008
TARGET CENTER LINE									
10,226.62	91.61	0.00	9,927.63	484.82	-449.30	623,846.525	765,040.600	32.712886	-103.606007
LP #1.6 Inc, 0 Az									
10,300.00	91.61	0.00	9,925.57	558.18	-449.30	623,919.876	765,040.600	32.713087	-103.606006
10,400.00	91.61	0.00	9,922.77	658.14	-449.30	624,019.837	765,040.600	32.713362	-103.606003
10,500.00	91.61	0.00	9,919.96	758.10	-449.30	624,119.798	765,040.600	32.713637	-103.606001
10,600.00	91.61	0.00	9,917.16	858.06	-449.30	624,219.758	765,040.600	32.713911	-103.605999
10,700.00	91.61	0.00	9,914.36	958.02	-449.30	624,319.719	765,040.600	32.714186	-103.605997
10,800.00	91.61	0.00	9,911.56	1,057.98	-449.30	624,419.680	765,040.600	32.714461	-103.605995
10,900.00	91.61	0.00	9,908.75	1,157.94	-449.30	624,519.641	765,040.600	32.714736	-103.605992
11,000.00	91.61	0.00	9,905.95	1,257.90	-449.30	624,619.601	765,040.600	32.715010	-103.605990
11,100.00	91.61	0.00	9,903.15	1,357.86	-449.30	624,719.562	765,040.600	32.715285	-103.605988
11,200.00	91.61	0.00	9,900.34	1,457.82	-449.30	624,819.523	765,040.600	32.715560	-103.605986
11,300.00	91.61	0.00	9,897.54	1,557.78	-449.30	624,919.483	765,040.600	32.715835	-103.605983
11,400.00	91.61	0.00	9,894.74	1,657.74	-449.30	625,019.444	765,040.600	32.716109	-103.605981
11,500.00	91.61	0.00	9,891.93	1,757.70	-449.30	625,119.405	765,040.600	32.716384	-103.605979
11,600.00	91.61	0.00	9,889.13	1,857.67	-449.30	625,219.365	765,040.600	32.716659	-103.605977
11,700.00	91.61	0.00	9,886.33	1,957.63	-449.30	625,319.326	765,040.600	32.716934	-103.605974
11,800.00	91.61	0.00	9,883.53	2,057.59	-449.30	625,419.287	765,040.600	32.717208	-103.605972
11,900.00	91.61	0.00	9,880.72	2,157.55	-449.30	625,519.248	765,040.600	32.717483	-103.605970
12,000.00	91.61	0.00	9,877.92	2,257.51	-449.30	625,619.208	765,040.600	32.717758	-103.605968



Planning Report - Geographic

Database: EDM 5000.15 Single User Db
 Company: McElvain Energy, Inc.
 Project: Sec. 30 T18S R34E
 Site: EK 30 WCD Federal Com
 Well: EK 30 BS2 Federal Com 4H
 Wellbore: Wellbore #1
 Design: Plan #7 07Nov18 kjs

Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
 TVD Reference: KB2 @ 3883.00usft
 MD Reference: KB2 @ 3883.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,100.00	91.61	0.00	9,875.12	2,357.47	-449.30	625,719.169	765,040.600	32.718032	-103.605966
12,200.00	91.61	0.00	9,872.31	2,457.43	-449.30	625,819.130	765,040.600	32.718307	-103.605963
12,300.00	91.61	0.00	9,869.51	2,557.39	-449.30	625,919.090	765,040.600	32.718582	-103.605961
12,400.00	91.61	0.00	9,866.71	2,657.35	-449.30	626,019.051	765,040.600	32.718857	-103.605959
12,500.00	91.61	0.00	9,863.90	2,757.31	-449.30	626,119.012	765,040.600	32.719131	-103.605957
12,600.00	91.61	0.00	9,861.10	2,857.27	-449.30	626,218.973	765,040.600	32.719406	-103.605954
12,700.00	91.61	0.00	9,858.30	2,957.23	-449.30	626,318.933	765,040.600	32.719681	-103.605952
12,800.00	91.61	0.00	9,855.50	3,057.19	-449.30	626,418.894	765,040.600	32.719956	-103.605950
12,900.00	91.61	0.00	9,852.69	3,157.15	-449.30	626,518.855	765,040.600	32.720230	-103.605948
13,000.00	91.61	0.00	9,849.89	3,257.12	-449.30	626,618.815	765,040.600	32.720505	-103.605945
13,100.00	91.61	0.00	9,847.09	3,357.08	-449.30	626,718.776	765,040.600	32.720780	-103.605943
13,200.00	91.61	0.00	9,844.28	3,457.04	-449.30	626,818.737	765,040.600	32.721055	-103.605941
13,300.00	91.61	0.00	9,841.48	3,557.00	-449.30	626,918.697	765,040.600	32.721329	-103.605939
13,400.00	91.61	0.00	9,838.68	3,656.96	-449.30	627,018.658	765,040.600	32.721604	-103.605937
13,500.00	91.61	0.00	9,835.87	3,756.92	-449.30	627,118.619	765,040.600	32.721879	-103.605934
13,600.00	91.61	0.00	9,833.07	3,856.88	-449.30	627,218.580	765,040.600	32.722154	-103.605932
13,700.00	91.61	0.00	9,830.27	3,956.84	-449.30	627,318.540	765,040.600	32.722428	-103.605930
13,800.00	91.61	0.00	9,827.47	4,056.80	-449.30	627,418.501	765,040.600	32.722703	-103.605928
13,900.00	91.61	0.00	9,824.66	4,156.76	-449.30	627,518.462	765,040.600	32.722978	-103.605925
14,000.00	91.61	0.00	9,821.86	4,256.72	-449.30	627,618.422	765,040.600	32.723253	-103.605923
14,100.00	91.61	0.00	9,819.06	4,356.68	-449.30	627,718.383	765,040.600	32.723527	-103.605921
14,200.00	91.61	0.00	9,816.25	4,456.64	-449.30	627,818.344	765,040.600	32.723802	-103.605919
14,300.00	91.61	0.00	9,813.45	4,556.60	-449.30	627,918.304	765,040.600	32.724077	-103.605916
14,400.00	91.61	0.00	9,810.65	4,656.57	-449.30	628,018.265	765,040.600	32.724351	-103.605914
14,500.00	91.61	0.00	9,807.84	4,756.53	-449.30	628,118.226	765,040.600	32.724626	-103.605912
14,600.00	91.61	0.00	9,805.04	4,856.49	-449.30	628,218.187	765,040.600	32.724901	-103.605910
14,700.00	91.61	0.00	9,802.24	4,956.45	-449.30	628,318.147	765,040.600	32.725176	-103.605908
14,800.00	91.61	0.00	9,799.44	5,056.41	-449.30	628,418.108	765,040.600	32.725450	-103.605905
14,900.00	91.61	0.00	9,796.63	5,156.37	-449.30	628,518.069	765,040.600	32.725725	-103.605903
15,000.00	91.61	0.00	9,793.83	5,256.33	-449.30	628,618.029	765,040.600	32.726000	-103.605901
15,100.00	91.61	0.00	9,791.03	5,356.29	-449.30	628,717.990	765,040.600	32.726275	-103.605899
15,200.00	91.61	0.00	9,788.22	5,456.25	-449.30	628,817.951	765,040.600	32.726549	-103.605896
15,300.00	91.61	0.00	9,785.42	5,556.21	-449.30	628,917.912	765,040.600	32.726824	-103.605894
15,400.00	91.61	0.00	9,782.62	5,656.17	-449.30	629,017.872	765,040.600	32.727099	-103.605892
15,500.00	91.61	0.00	9,779.81	5,756.13	-449.30	629,117.833	765,040.600	32.727374	-103.605890
15,600.00	91.61	0.00	9,777.01	5,856.09	-449.30	629,217.794	765,040.600	32.727648	-103.605887
15,700.00	91.61	0.00	9,774.21	5,956.05	-449.30	629,317.754	765,040.600	32.727923	-103.605885
15,800.00	91.61	0.00	9,771.41	6,056.02	-449.30	629,417.715	765,040.600	32.728198	-103.605883
15,900.00	91.61	0.00	9,768.60	6,155.98	-449.30	629,517.676	765,040.600	32.728473	-103.605881
16,000.00	91.61	0.00	9,765.80	6,255.94	-449.30	629,617.636	765,040.600	32.728747	-103.605879
16,100.00	91.61	0.00	9,763.00	6,355.90	-449.30	629,717.597	765,040.600	32.729022	-103.605876
16,200.00	91.61	0.00	9,760.19	6,455.86	-449.30	629,817.558	765,040.600	32.729297	-103.605874
16,300.00	91.61	0.00	9,757.39	6,555.82	-449.30	629,917.519	765,040.600	32.729572	-103.605872
16,400.00	91.61	0.00	9,754.59	6,655.78	-449.30	630,017.479	765,040.600	32.729846	-103.605870
16,500.00	91.61	0.00	9,751.79	6,755.74	-449.30	630,117.440	765,040.600	32.730121	-103.605867
16,600.00	91.61	0.00	9,748.98	6,855.70	-449.30	630,217.401	765,040.600	32.730396	-103.605865
16,700.00	91.61	0.00	9,746.18	6,955.66	-449.30	630,317.361	765,040.600	32.730670	-103.605863
16,800.00	91.61	0.00	9,743.38	7,055.62	-449.30	630,417.322	765,040.600	32.730945	-103.605861
16,900.00	91.61	0.00	9,740.57	7,155.58	-449.30	630,517.283	765,040.600	32.731220	-103.605858
17,000.00	91.61	0.00	9,737.77	7,255.54	-449.30	630,617.243	765,040.600	32.731495	-103.605856
17,100.00	91.61	0.00	9,734.97	7,355.50	-449.30	630,717.204	765,040.600	32.731769	-103.605854
17,200.00	91.61	0.00	9,732.16	7,455.47	-449.30	630,817.165	765,040.600	32.732044	-103.605852
17,300.00	91.61	0.00	9,729.36	7,555.43	-449.30	630,917.126	765,040.600	32.732319	-103.605850
17,400.00	91.61	0.00	9,726.56	7,655.39	-449.30	631,017.086	765,040.600	32.732594	-103.605847
17,500.00	91.61	0.00	9,723.76	7,755.35	-449.30	631,117.047	765,040.600	32.732868	-103.605845



Planning Report - Geographic

Database: EDM 5000.15 Single User Db
Company: McElvain Energy, Inc.
Project: Sec. 30 T18S R34E
Site: EK 30 WCD Federal Com
Well: EK 30 BS2 Federal Com 4H
Wellbore: Wellbore #1
Design: Plan #7 07Nov18 kjs

Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
TVD Reference: KB2 @ 3883.00usft
MD Reference: KB2 @ 3883.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,529.47	91.61	0.00	9,722.65	7,784.80	-449.30	631,146.500	765,040.600	32.732949	-103.605844
TD / PBHL 30 BS2 4H									
17,529.49	91.61	0.00	9,722.65	7,784.82	-449.30	631,146.518	765,040.600	32.732949	-103.605844
TD at 17529.49									
17,600.00	91.61	0.00	9,720.67	7,855.30	-449.30	631,217.000	765,040.600	32.733143	-103.605843
17,604.47	91.61	0.00	9,720.55	7,859.77	-449.30	631,221.468	765,040.600	32.733155	-103.605843
End of 75' Rathole									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
TD / PBHL 30 BS2 4H	0.00	359.61	9,722.65	7,784.80	-449.30	631,146.500	765,040.600	32.732949	-103.605844
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,800.00	1,800.00	13 3/8"	13-3/8	17-1/2
3,402.25	3,400.00	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,681.00	1,681.00	Rustler		-1.60	0.00
1,741.00	1,741.00	Salt		-1.00	0.00
3,258.04	3,256.03	Yates		-1.60	0.00
3,733.84	3,731.04	Seven Rivers		-1.60	0.00
4,435.02	4,431.06	Queen		-1.60	0.00
4,710.48	4,706.06	Penrose		-1.60	0.00
5,261.41	5,256.08	San Andres		-1.60	0.00
5,411.66	5,406.08	Delaware		-1.60	0.00
5,451.73	5,446.08	1st Delaware Sand		-1.60	0.00
5,737.21	5,731.09	2nd Delaware Sand		-1.60	0.00
7,630.39	7,621.13	Bone Spring		-1.60	0.00
8,967.64	8,956.16	1st Bone Spring Sand		-1.60	0.00
9,518.59	9,506.08	2nd Bone Spring Sand		-1.60	0.00
10,070.88	9,906.75	TOP TARGET WINDOW		-1.60	0.00
10,213.87	9,927.81	TARGET CENTER LINE		-1.60	0.00



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Local Co-ordinate Reference: Well EK 30 BS2 Federal Com 4H
TVD Reference: KB2 @ 3883.00usft
MD Reference: KB2 @ 3883.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,900.00	1,900.00	0.00	0.00	Start Build 1.50
2,119.99	2,119.87	-0.09	-6.33	Hold 3.30 Inc, 269.17 Az
9,462.59	9,450.29	-6.21	-428.93	KOP 12/100
10,070.88	9,906.75	331.19	-449.30	POP
10,226.62	9,927.63	484.82	-449.30	LP 91.6 Inc, 0 Az
17,529.49	9,722.65	7,784.82	-449.30	TD at 17529.49
17,604.47	9,720.55	7,859.77	-449.30	End of 75' Rathole