

DISTRICT I1020 N. French Dr., Hobbs, NM 88240
Phone (505) 293-8181 Fax: (505) 292-0120**DISTRICT II**1301 W. Grand Avenue, Artesia, NM 88210
Phone (505) 746-1863 Fax: (505) 746-9720**DISTRICT III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 836-6170 Fax: (505) 831-0170**DISTRICT IV**1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3483 Fax: (505) 476-3482State of New Mexico
Energy, Minerals and Natural Resources Department**HOBBS-ODC**

Form C-102

Revised August 1, 2011

OIL CONSERVATION DIVISION1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

JUL 28 2014

Submit one copy to appropriate
District Office**RECEIVED**☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-41362	Pool Code	Pool Name Sand Dunes; Bone Spring, South
Property Code	Property Name JAMES FEDERAL	Well Number 21
OGRID No. 215099	Operator Name CIMAREX ENERGY CO.	Elevation 3689

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	23 S	32 E		185	NORTH	1980	EAST	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
O	29	23 S	32 E		330	SOUTH	1760	EAST	LEA
Dedicated Acres 160	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

N 467179.75 E 735457.36 N 467201.92 E 738092.06 N 464538.72 E 735473.58 N 461898.56 E 735489.81	N 467228.29 E 740727.62 N 464583.86 E 740745.77 N 461943.00 E 740762.26	185' 3689.7' 3689.3' 1760' NM0559539 S.L. B.H. SURFACE LOCATION Lat - N 32°16'56.30" Long - W 103°41'40.33" NMSPC- N 467023.4 E 738749.4 (HAD-83) PROPOSED BOTTOM HOLE LOCATION Lat - N 32°16'09.13" Long - W 103°41'37.74" NMSPC- N 462257.8 E 739000.3 (HAD-83)	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Deysi Favela</i> 6/13/2014 Signature Date Deysi Favela Printed Name dfavela@cimarex.com Email Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Surveyed 6-13-2014 Signature of Professional Surveyor [Signature] Certificate No. Gory L. Jones 7977 BASIN SURVEYS 28247
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JUL 30 2014



Cimarex

PATHFINDER
A Schlumberger Company

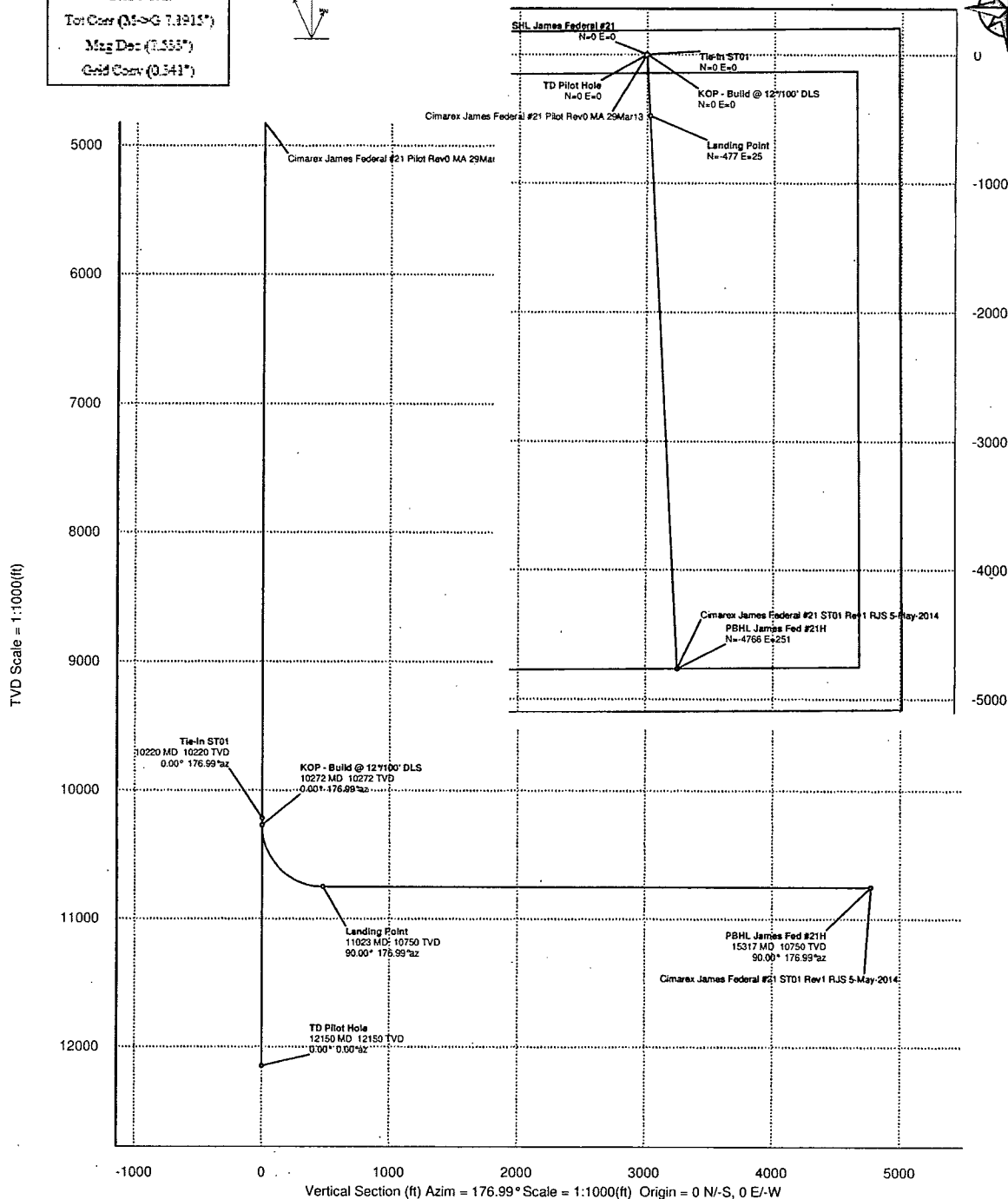
James Federal #21H NM Lea County

Mag. North
Model: 80041012
Dip: -1.5013°
Date: March 25, 2013
Surface Location: 16043 New Mexico State Plaza, Eastern Zone, 100 Feet
Loc: M 88 16 56.200
Northing: 48022.40 RUS
Easting: 726743.40 RUS
Grid Zone: 18QAT
Scale Factor: 0.9999377
Well: James Federal #21H
TVD Ref: Ground Level (Schlumberger 1481)
Plan: ST01 Rev1 RJS 5-May-2014
Draw Date: March 26, 2013

Grid North
Tilt Cor (M-G 1.1915")
Mag Dec (1.535")
Grid Conv (0.541")



Scale = 1:1000(ft) E >>> W <<< 0 1000 2000



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Tie-In ST01	10220.00	0.00	176.99	10220.00	0.00	0.00	0.00	
KOP - Build @ 12°/100' DLS	10272.00	0.00	176.99	10272.00	0.00	0.00	0.00	0.00
Landing Point	11022.84	90.00	176.99	10750.00	478.00	-477.34	25.14	11.99
PBHL James Fed #21H	15317.27	90.00	176.99	10750.00	4772.43	-4765.83	250.91	0.00



Cimarex James Federal #21 ST01 Rev1 RJS 5-May-2014 Proposal Report

(Non-Def Plan)

Report Date: May 05, 2014 - 01:31 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: TBD / Cimarex James Federal #21H
Well: Cimarex James Federal #21H
Borehole: ST01 Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex James Federal #21 ST01 Rev1 RJS 5-May-2014
Survey Date: March 29, 2013
Tort / AHD / DDI / ERD Ratio: 90.003° / 4772.431 ft / 5.787 / 0.444
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 56.30057", W 103° 41' 40.33297"
Location Grid N/E Y/X: N 467023.400 RUS, E 738749.400 ftUS
CRS Grid Convergence Angle: 0.3412°
Grid Scale Factor: 0.99995372

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 176.986° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground Level
TVD Reference Elevation: 3689.000 ft above MSL
Seabed / Ground Elevation: 3689.000 ft above MSL
Magnetic Declination: 7.533°
Total Gravity Field Strength: 998.4648mgn (9.80565 Based)
Total Magnetic Field Strength: 48433.539 nT
Magnetic Dip Angle: 60.133°
Declination Date: March 29, 2013
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.3412°

Total Corr Mag North->Grid North: 7.1915°

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS (ft/mgn)
SHL James Federal #21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	467023.40	738749.40	N 32 16 56.30	W 103 41 40.33	0.00	0.00	N/A
Tie-In ST01	10220.00	0.00	176.99	10220.00	0.00	0.00	0.00	467023.40	738749.40	N 32 16 56.30	W 103 41 40.33	0.00	0.00	N/A
KOP - Build @ 12"/100' DLS	10272.00	0.00	176.99	10272.00	0.00	0.00	0.00	467023.40	738749.40	N 32 16 56.30	W 103 41 40.33	0.00	0.00	0.00
	10300.00	3.36	176.99	10299.98	0.82	-0.82	0.04	467022.58	738749.44	N 32 16 56.29	W 103 41 40.33	0.82	176.99	14.99
	10400.00	15.34	176.99	10398.48	17.04	-17.01	0.90	467006.39	738750.30	N 32 16 56.13	W 103 41 40.32	17.04	176.99	11.99
	10500.00	27.33	176.99	10491.45	53.35	-53.28	2.81	466970.12	738752.21	N 32 16 55.77	W 103 41 40.30	53.35	176.99	11.99
	10600.00	39.32	176.99	10574.86	108.19	-108.04	5.69	466915.37	738755.09	N 32 16 55.23	W 103 41 40.27	108.19	176.99	11.99
	10700.00	51.30	176.99	10645.06	179.15	-178.90	9.42	466844.51	738758.82	N 32 16 54.53	W 103 41 40.24	179.15	176.99	11.99
	10800.00	63.29	176.99	10698.99	263.14	-262.78	13.84	466760.63	738763.24	N 32 16 53.70	W 103 41 40.19	263.14	176.99	11.99
	10900.00	75.28	176.99	10734.30	356.51	-356.01	18.75	466667.40	738768.15	N 32 16 52.78	W 103 41 40.14	356.51	176.99	11.99
	11000.00	87.26	176.99	10749.45	455.17	-454.54	23.94	466568.88	738773.34	N 32 16 51.80	W 103 41 40.09	455.17	176.99	11.99
Landing Point	11022.84	90.00	176.99	10750.00	478.00	-477.34	25.14	466546.08	738774.54	N 32 16 51.58	W 103 41 40.07	478.00	176.99	11.99
	11100.00	90.00	176.99	10750.00	555.16	-554.39	29.20	466469.04	738778.60	N 32 16 50.81	W 103 41 40.03	555.16	176.99	0.00
	11200.00	90.00	176.99	10750.00	655.16	-654.25	34.46	466369.18	738783.86	N 32 16 49.82	W 103 41 39.98	655.16	176.99	0.00
	11300.00	90.00	176.99	10750.00	755.16	-754.11	39.72	466269.32	738789.12	N 32 16 48.84	W 103 41 39.92	755.16	176.99	0.00
	11400.00	90.00	176.99	10750.00	855.16	-853.98	44.98	466169.47	738794.38	N 32 16 47.85	W 103 41 39.87	855.16	176.99	0.00
	11500.00	90.00	176.99	10750.00	955.16	-953.84	50.24	466069.61	738799.64	N 32 16 46.86	W 103 41 39.81	955.16	176.99	0.00
	11600.00	90.00	176.99	10750.00	1055.16	-1053.70	55.50	465969.75	738804.89	N 32 16 45.87	W 103 41 39.76	1055.16	176.99	0.00
	11700.00	90.00	176.99	10750.00	1155.16	-1153.56	60.76	465869.90	738810.15	N 32 16 44.88	W 103 41 39.71	1155.16	176.99	0.00
	11800.00	90.00	176.99	10750.00	1255.16	-1253.42	66.01	465770.04	738815.41	N 32 16 43.89	W 103 41 39.65	1255.16	176.99	0.00
	11900.00	90.00	176.99	10750.00	1355.16	-1353.28	71.27	465670.18	738820.67	N 32 16 42.91	W 103 41 39.60	1355.16	176.99	0.00
	12000.00	90.00	176.99	10750.00	1455.16	-1453.15	76.53	465570.32	738825.93	N 32 16 41.92	W 103 41 39.54	1455.16	176.99	0.00
	12100.00	90.00	176.99	10750.00	1555.16	-1553.01	81.79	465470.47	738831.19	N 32 16 40.93	W 103 41 39.49	1555.16	176.99	0.00
	12200.00	90.00	176.99	10750.00	1655.16	-1652.87	87.05	465370.61	738836.44	N 32 16 39.94	W 103 41 39.43	1655.16	176.99	0.00
	12300.00	90.00	176.99	10750.00	1755.16	-1752.73	92.31	465270.75	738841.70	N 32 16 38.95	W 103 41 39.38	1755.16	176.99	0.00
	12400.00	90.00	176.99	10750.00	1855.16	-1852.59	97.57	465170.90	738846.96	N 32 16 37.96	W 103 41 39.33	1855.16	176.99	0.00
	12500.00	90.00	176.99	10750.00	1955.16	-1952.45	102.82	465071.04	738852.22	N 32 16 36.98	W 103 41 39.27	1955.16	176.99	0.00
	12600.00	90.00	176.99	10750.00	2055.16	-2052.32	108.08	464971.18	738857.48	N 32 16 35.99	W 103 41 39.22	2055.16	176.99	0.00
	12700.00	90.00	176.99	10750.00	2155.16	-2152.18	113.34	464871.33	738862.73	N 32 16 35.00	W 103 41 39.16	2155.16	176.99	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	1025 (ftUS)
	12800.00	90.00	176.99	10750.00	2255.16	-2252.04	118.60	464771.47	738867.99	N 32 16 34.01	W 103 41 39.11	2255.16	176.99	0.00
	12900.00	90.00	176.99	10750.00	2355.16	-2351.90	123.86	464671.61	738873.25	N 32 16 33.02	W 103 41 39.05	2355.16	176.99	0.00
	13000.00	90.00	176.99	10750.00	2455.16	-2451.76	129.11	464571.76	738878.51	N 32 16 32.03	W 103 41 39.00	2455.16	176.99	0.00
	13100.00	90.00	176.99	10750.00	2555.16	-2551.62	134.37	464471.90	738883.76	N 32 16 31.04	W 103 41 38.94	2555.16	176.99	0.00
	13200.00	90.00	176.99	10750.00	2655.16	-2651.49	139.63	464372.04	738889.02	N 32 16 30.06	W 103 41 38.89	2655.16	176.99	0.00
	13300.00	90.00	176.99	10750.00	2755.16	-2751.35	144.88	464272.19	738894.28	N 32 16 29.07	W 103 41 38.84	2755.16	176.99	0.00
	13400.00	90.00	176.99	10750.00	2855.16	-2851.21	150.14	464172.33	738899.53	N 32 16 28.08	W 103 41 38.78	2855.16	176.99	0.00
	13500.00	90.00	176.99	10750.00	2955.16	-2951.07	155.40	464072.47	738904.79	N 32 16 27.09	W 103 41 38.73	2955.16	176.99	0.00
	13600.00	90.00	176.99	10750.00	3055.16	-3050.93	160.66	463972.61	738910.05	N 32 16 26.10	W 103 41 38.67	3055.16	176.99	0.00
	13700.00	90.00	176.99	10750.00	3155.16	-3150.79	165.91	463872.76	738915.30	N 32 16 25.11	W 103 41 38.62	3155.16	176.99	0.00
	13800.00	90.00	176.99	10750.00	3255.16	-3250.66	171.17	463772.90	738920.56	N 32 16 24.13	W 103 41 38.56	3255.16	176.99	0.00
	13900.00	90.00	176.99	10750.00	3355.16	-3350.52	176.43	463673.04	738925.82	N 32 16 23.14	W 103 41 38.51	3355.16	176.99	0.00
	14000.00	90.00	176.99	10750.00	3455.16	-3450.38	181.68	463573.19	738931.07	N 32 16 22.15	W 103 41 38.46	3455.16	176.99	0.00
	14100.00	90.00	176.99	10750.00	3555.16	-3550.24	186.94	463473.33	738936.33	N 32 16 21.16	W 103 41 38.40	3555.16	176.99	0.00
	14200.00	90.00	176.99	10750.00	3655.16	-3650.10	192.19	463373.47	738941.58	N 32 16 20.17	W 103 41 38.35	3655.16	176.99	0.00
	14300.00	90.00	176.99	10750.00	3755.16	-3749.96	197.45	463273.62	738946.84	N 32 16 19.18	W 103 41 38.29	3755.16	176.99	0.00
	14400.00	90.00	176.99	10750.00	3855.16	-3849.83	202.71	463173.76	738952.10	N 32 16 18.20	W 103 41 38.24	3855.16	176.99	0.00
	14500.00	90.00	176.99	10750.00	3955.16	-3949.69	207.96	463073.90	738957.35	N 32 16 17.21	W 103 41 38.18	3955.16	176.99	0.00
	14600.00	90.00	176.99	10750.00	4055.16	-4049.55	213.22	462974.05	738962.61	N 32 16 16.22	W 103 41 38.13	4055.16	176.99	0.00
	14700.00	90.00	176.99	10750.00	4155.16	-4149.41	218.47	462874.19	738967.86	N 32 16 15.23	W 103 41 38.08	4155.16	176.99	0.00
	14800.00	90.00	176.99	10750.00	4255.16	-4249.27	223.73	462774.33	738973.12	N 32 16 14.24	W 103 41 38.02	4255.16	176.99	0.00
	14900.00	90.00	176.99	10750.00	4355.16	-4349.14	228.98	462674.47	738978.37	N 32 16 13.25	W 103 41 37.97	4355.16	176.99	0.00
	15000.00	90.00	176.99	10750.00	4455.16	-4449.00	234.24	462574.62	738983.63	N 32 16 12.26	W 103 41 37.91	4455.16	176.99	0.00
	15100.00	90.00	176.99	10750.00	4555.16	-4548.86	239.49	462474.76	738988.88	N 32 16 11.28	W 103 41 37.86	4555.16	176.99	0.00
	15200.00	90.00	176.99	10750.00	4655.16	-4648.72	244.75	462374.90	738994.14	N 32 16 10.29	W 103 41 37.80	4655.16	176.99	0.00
	15300.00	90.00	176.99	10750.00	4755.16	-4748.58	250.00	462275.05	738999.39	N 32 16 9.30	W 103 41 37.75	4755.16	176.99	0.00
PBHL James Fed #21H	15317.27	90.00	176.99	10750.00	4772.43	-4765.83	250.91	462257.80	739000.30	N 32 16 9.13	W 103 41 37.74	4772.43	176.99	0.00

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	10220.000	1/100.000	30.000	30.000	SLB_MWD-STD	Pilot Borehole / Cimarex James Federal #21 Pilot Rev0 MA
	10220.000	15317.271	1/100.000	30.000	30.000	SLB_MWD-STD	ST01 Borehole / Cimarex James Federal #21 ST01 Rev1 RJS 5-