

District I
1623 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

ARTESIA DISTRICT

☒ AMENDED REPORT

JAN 28 2016

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-43488	² Pool Code 97494	³ Pool Name Cottonwood Draw; B.S.
⁴ Property Code 34114	⁵ Property Name GADWALL 18 FEDERAL COM	⁶ Well Number 5H
⁷ OGRID No. 162683	⁸ Operator Name CIMAREX ENERGY CO. OF COLORADO	⁹ Elevation 3203.6'

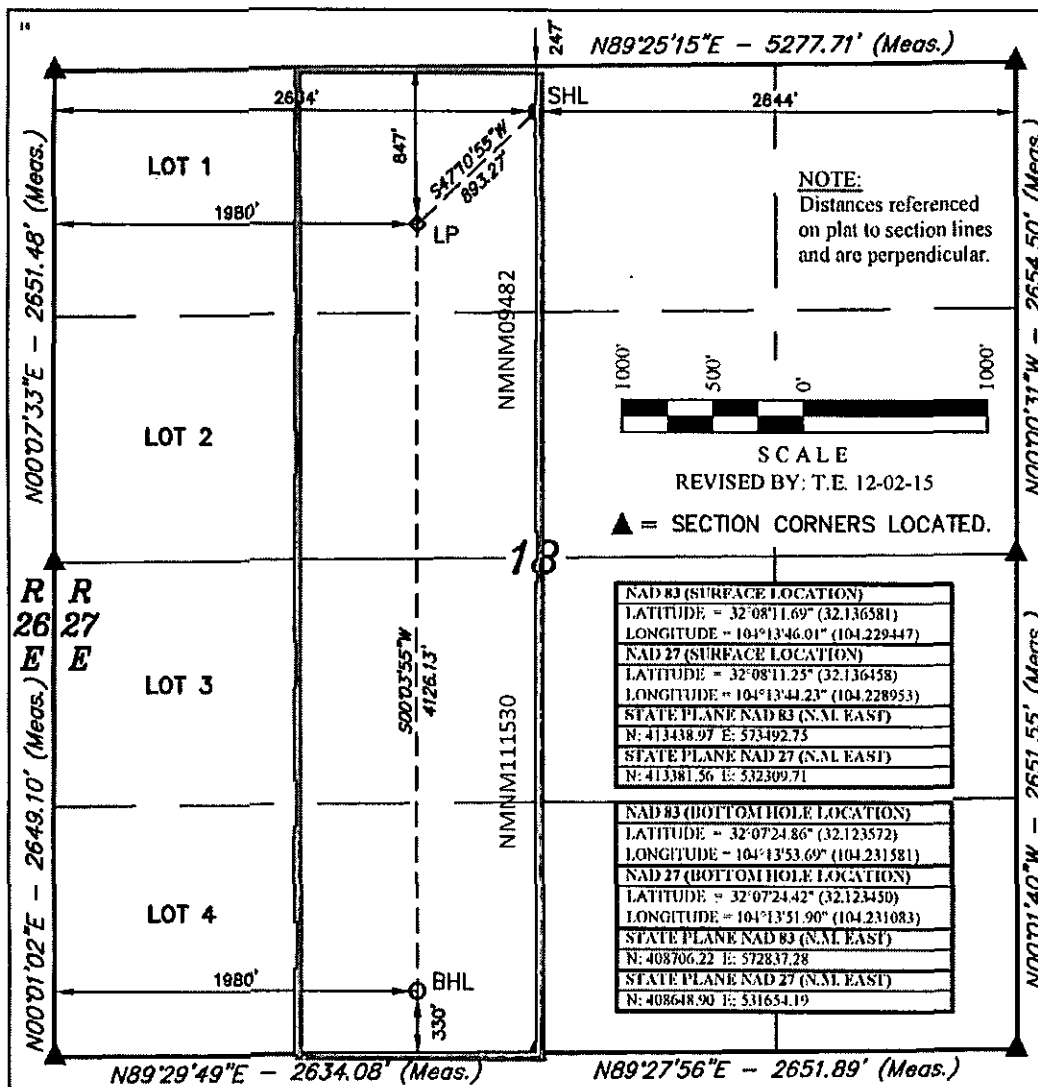
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B C	18	25S	27E		247	NORTH	2634	WEST	EDDY

¹¹ 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
N	18	25S	27E		330	SOUTH	1980	WEST	EDDY
¹² Dedicated Acres 200		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.



¹⁷ 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.

Aricka Easterling 12/4/15
Signature Date

Aricka Easterling

Printed Name

aeasterling@cimarex.com
E-mail Address

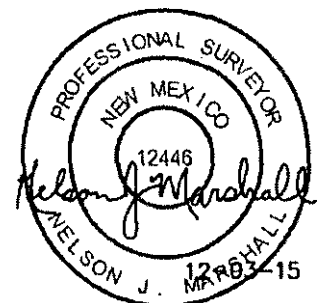
¹⁸ SURVEYOR
CERTIFICATION

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.

December 02, 2015

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number:

Cimarex Gadwall 18 Federal 5H Rev1 JLP 04Dec2015 Proposal Geodetic Report (Non-Def Plan)



Report Date: December 04, 2015 - 09:17 AM
 Client: Cimarex
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Cimarex Gadwall 18 Federal 5H / Cimarex Gadwall 18 Federal 5H
 Well: Gadwall 18 Federal 5H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Cimarex Gadwall 18 Federal 5H Rev1 JLP 04Dec2015
 Survey Date: May 28, 2015
 Tort / AHD / DDI / ERD Ratio: 140.982 * / 5172 428 ft / 6.082 / 0.711
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 8' 11.68754", W 104° 13' 46 01446"
 Location Grid N/E Y/X: N 413438 970 ftUS, E 573492.750 ftUS
 CRS Grid Convergence Angle: 0.0553 *
 Grid Scale Factor: 0.99991028
 Version / Patch: 2.8 572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 187.885 * (Grid North)
 Vertical Section Origin: 0 000 ft, 0.000 ft
 TVD Reference Datum: GL
 TVD Reference Elevation: 3203.600 ft above MSL
 Seabed / Ground Elevation: 3203.600 ft above MSL
 Magnetic Declination: 7 654 *
 Total Gravity Field Strength: 998.4458mgn (9 80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48208 610 nT
 Magnetic Dip Angle: 59.918 *
 Declination Date: May 28, 2015
 Magnetic Declination Model: HDGM 2014
 North Reference: Grid North
 Grid Convergence Used: 0.0553 *
 Total Corr Mag North->Grid: 7.5982 *
 North:
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Cimarex Gadwall 18 Federal 5H [247' FNL, 2634' FWL]	0.00	0.00	270.00	0.00	0.00	0.00	0.00	N/A	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	100.00	0.00	270.00	100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	200.00	0.00	270.00	200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	300.00	0.00	270.00	300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	400.00	0.00	270.00	400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	500.00	0.00	270.00	500.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	600.00	0.00	270.00	600.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	700.00	0.00	270.00	700.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	800.00	0.00	270.00	800.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	900.00	0.00	270.00	900.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1000.00	0.00	270.00	1000.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1100.00	0.00	270.00	1100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1200.00	0.00	270.00	1200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1300.00	0.00	270.00	1300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1400.00	0.00	270.00	1400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1500.00	0.00	270.00	1500.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1600.00	0.00	270.00	1600.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1700.00	0.00	270.00	1700.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1800.00	0.00	270.00	1800.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	1900.00	0.00	270.00	1900.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2000.00	0.00	270.00	2000.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2100.00	0.00	270.00	2100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2200.00	0.00	270.00	2200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2300.00	0.00	270.00	2300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2400.00	0.00	270.00	2400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	

Comments	MD (m)	Incl (°)	Azim Grid (°)	TVD (m)	VSEC (m)	NS (m)	EW (m)	DLS (°/100m)	Northing (mUS)	Easting (mUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	2500.00	0.00	270.00	2500.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2600.00	0.00	270.00	2600.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2700.00	0.00	270.00	2700.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2800.00	0.00	270.00	2800.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	2900.00	0.00	270.00	2900.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3000.00	0.00	270.00	3000.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3100.00	0.00	270.00	3100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3200.00	0.00	270.00	3200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3300.00	0.00	270.00	3300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3400.00	0.00	270.00	3400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3500.00	0.00	270.00	3500.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3600.00	0.00	270.00	3600.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3700.00	0.00	270.00	3700.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3800.00	0.00	270.00	3800.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	3900.00	0.00	270.00	3900.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4000.00	0.00	270.00	4000.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4100.00	0.00	270.00	4100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4200.00	0.00	270.00	4200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4300.00	0.00	270.00	4300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4400.00	0.00	270.00	4400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4500.00	0.00	270.00	4500.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4600.00	0.00	270.00	4600.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4700.00	0.00	270.00	4700.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4800.00	0.00	270.00	4800.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	4900.00	0.00	270.00	4900.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5000.00	0.00	270.00	5000.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5100.00	0.00	270.00	5100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5200.00	0.00	270.00	5200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5300.00	0.00	270.00	5300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5400.00	0.00	270.00	5400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5500.00	0.00	270.00	5500.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5600.00	0.00	270.00	5600.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5700.00	0.00	270.00	5700.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5800.00	0.00	270.00	5800.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	5900.00	0.00	270.00	5900.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	6000.00	0.00	270.00	6000.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	6100.00	0.00	270.00	6100.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	6200.00	0.00	270.00	6200.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	6300.00	0.00	270.00	6300.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	6400.00	0.00	270.00	6400.00	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
Build @ 10°/100'	6466.60	0.00	270.00	6466.60	0.00	0.00	0.00	0.00	413438.97	573492.75	N 32 8 11.69 W 104 13 46.01	
	6500.00	3.34	270.00	6499.98	0.13	0.00	-0.97	10.00	413438.97	573491.78	N 32 8 11.69 W 104 13 46.03	
	6600.00	13.34	270.00	6598.80	2.12	0.00	-15.46	10.00	413438.97	573477.29	N 32 8 11.69 W 104 13 46.19	
	6700.00	23.34	270.00	6693.60	6.43	0.00	-46.89	10.00	413438.97	573445.87	N 32 8 11.69 W 104 13 46.56	
	6800.00	33.34	270.00	6781.50	12.94	0.00	-94.30	10.00	413438.97	573398.46	N 32 8 11.69 W 104 13 47.11	
	6900.00	43.34	270.00	6859.84	21.44	0.00	-156.25	10.00	413438.97	573336.52	N 32 8 11.69 W 104 13 47.83	
Build & Turn @ 10°/100'	6973.30	50.67	270.00	6909.79	28.79	0.00	-209.83	10.00	413438.97	573282.94	N 32 8 11.69 W 104 13 48.45	
	7000.00	50.74	266.55	6926.70	32.23	-0.62	-230.47	10.00	413438.35	573262.30	N 32 8 11.68 W 104 13 48.69	
	7100.00	51.88	253.81	6989.37	55.95	-13.95	-307.09	10.00	413425.02	573185.69	N 32 8 11.55 W 104 13 49.59	
	7200.00	54.35	241.68	7049.52	96.09	-44.27	-380.82	10.00	413394.71	573111.96	N 32 8 11.25 W 104 13 50.44	
	7300.00	57.94	230.44	7105.35	151.44	-90.64	-449.43	10.00	413348.33	573043.36	N 32 8 10.79 W 104 13 51.24	
	7400.00	62.45	220.14	7155.14	220.32	-151.68	-510.83	10.00	413287.31	572981.96	N 32 8 10.19 W 104 13 51.96	
	7500.00	67.65	210.71	7197.40	300.64	-225.51	-563.16	10.00	413213.48	572929.64	N 32 8 9.46 W 104 13 52.57	
	7600.00	73.35	201.99	7230.82	389.94	-309.90	-604.83	10.00	413129.10	572867.98	N 32 8 8.63 W 104 13 53.05	
	7700.00	79.40	193.79	7254.40	485.53	-402.28	-634.56	10.00	413036.73	572858.25	N 32 8 7.71 W 104 13 53.40	
	7800.00	85.65	185.92	7287.43	584.49	-499.85	-651.46	10.00	412939.17	572841.35	N 32 8 6.75 W 104 13 53.60	
Landing Point	7876.37	90.48	180.00	7270.00	660.48	-576.01	-655.39	10.00	412863.01	572837.42	N 32 8 5.99 W 104 13 53.64	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7900.00	90.48	180.00	7269.80	683.89	-599.64	-655.39	0.00	412839.38	572837.42	N 32 8 5.76 W	104 13 53.64
	8000.00	90.48	180.00	7268.96	782.94	-699.64	-655.39	0.00	412739.39	572837.42	N 32 8 4.77 W	104 13 53.64
	8100.00	90.48	180.00	7268.11	881.99	-799.64	-655.39	0.00	412639.41	572837.42	N 32 8 3.78 W	104 13 53.65
	8200.00	90.48	180.00	7287.27	981.04	-899.63	-655.39	0.00	412539.42	572837.42	N 32 8 2.79 W	104 13 53.65
	8300.00	90.48	180.00	7266.43	1080.09	-999.63	-655.39	0.00	412439.43	572837.42	N 32 8 1.80 W	104 13 53.65
	8400.00	90.48	180.00	7265.58	1179.14	-1099.63	-655.39	0.00	412339.44	572837.42	N 32 8 0.81 W	104 13 53.65
	8500.00	90.48	180.00	7264.74	1278.19	-1199.62	-655.40	0.00	412239.46	572837.42	N 32 7 59.82 W	104 13 53.65
	8600.00	90.48	180.00	7263.89	1377.24	-1299.62	-655.40	0.00	412139.47	572837.41	N 32 7 58.83 W	104 13 53.65
	8700.00	90.48	180.00	7263.05	1476.30	-1399.62	-655.40	0.00	412039.48	572837.41	N 32 7 57.84 W	104 13 53.65
	8800.00	90.48	180.00	7262.21	1575.35	-1499.61	-655.40	0.00	411939.49	572837.41	N 32 7 56.85 W	104 13 53.65
	8900.00	90.48	180.00	7261.36	1674.40	-1599.61	-655.40	0.00	411839.51	572837.41	N 32 7 55.87 W	104 13 53.65
	9000.00	90.48	180.00	7260.52	1773.45	-1699.61	-655.40	0.00	411739.52	572837.41	N 32 7 54.88 W	104 13 53.66
	9100.00	90.48	180.00	7259.68	1872.50	-1799.60	-655.40	0.00	411639.53	572837.41	N 32 7 53.89 W	104 13 53.66
	9200.00	90.48	180.00	7258.83	1971.55	-1899.60	-655.41	0.00	411539.55	572837.40	N 32 7 52.90 W	104 13 53.66
	9300.00	90.48	180.00	7257.99	2070.60	-1999.59	-655.41	0.00	411439.56	572837.40	N 32 7 51.91 W	104 13 53.66
	9400.00	90.48	180.00	7257.15	2169.65	-2099.59	-655.41	0.00	411339.57	572837.40	N 32 7 50.92 W	104 13 53.66
	9500.00	90.48	180.00	7256.31	2268.71	-2199.59	-655.41	0.00	411239.58	572837.40	N 32 7 49.93 W	104 13 53.66
	9600.00	90.48	180.00	7255.46	2367.76	-2299.58	-655.42	0.00	411139.60	572837.39	N 32 7 48.94 W	104 13 53.66
	9700.00	90.48	180.00	7254.62	2466.81	-2399.58	-655.42	0.00	411039.61	572837.39	N 32 7 47.95 W	104 13 53.66
	9800.00	90.48	180.00	7253.78	2565.86	-2499.58	-655.42	0.00	410939.62	572837.39	N 32 7 46.96 W	104 13 53.66
	9900.00	90.48	180.00	7252.94	2664.91	-2599.57	-655.42	0.00	410839.63	572837.39	N 32 7 45.97 W	104 13 53.67
	10000.00	90.48	180.00	7252.09	2763.96	-2699.57	-655.43	0.00	410739.65	572837.38	N 32 7 44.98 W	104 13 53.67
	10100.00	90.48	180.00	7251.25	2863.01	-2799.57	-655.43	0.00	410639.66	572837.38	N 32 7 43.99 W	104 13 53.67
	10200.00	90.48	180.00	7250.41	2962.07	-2899.56	-655.44	0.00	410539.67	572837.37	N 32 7 43.00 W	104 13 53.67
	10300.00	90.48	180.00	7249.57	3061.12	-2999.56	-655.44	0.00	410439.69	572837.37	N 32 7 42.01 W	104 13 53.67
	10400.00	90.48	180.00	7248.73	3160.17	-3099.56	-655.44	0.00	410339.70	572837.37	N 32 7 41.02 W	104 13 53.67
	10500.00	90.48	180.00	7247.89	3259.22	-3199.55	-655.45	0.00	410239.71	572837.36	N 32 7 40.03 W	104 13 53.67
	10600.00	90.48	180.00	7247.05	3358.27	-3299.55	-655.45	0.00	410139.72	572837.36	N 32 7 39.04 W	104 13 53.67
	10700.00	90.48	180.00	7246.20	3457.32	-3399.55	-655.46	0.00	410039.74	572837.35	N 32 7 38.05 W	104 13 53.67
	10800.00	90.48	180.00	7245.36	3556.37	-3499.54	-655.46	0.00	409939.75	572837.35	N 32 7 37.06 W	104 13 53.68
	10900.00	90.48	180.00	7244.52	3655.43	-3599.54	-655.47	0.00	409839.76	572837.35	N 32 7 36.08 W	104 13 53.68
	11000.00	90.48	180.00	7243.68	3754.48	-3699.53	-655.47	0.00	409739.77	572837.34	N 32 7 35.09 W	104 13 53.68
	11100.00	90.48	180.00	7242.84	3853.53	-3799.53	-655.48	0.00	409639.79	572837.34	N 32 7 34.10 W	104 13 53.68
	11200.00	90.48	180.00	7242.00	3952.58	-3899.53	-655.48	0.00	409539.80	572837.33	N 32 7 33.11 W	104 13 53.68
	11300.00	90.48	180.00	7241.16	4051.63	-3999.52	-655.49	0.00	409439.81	572837.32	N 32 7 32.12 W	104 13 53.68
	11400.00	90.48	180.00	7240.32	4150.69	-4099.52	-655.49	0.00	409339.83	572837.32	N 32 7 31.13 W	104 13 53.68
	11500.00	90.48	180.00	7239.48	4249.74	-4199.52	-655.50	0.00	409239.84	572837.31	N 32 7 30.14 W	104 13 53.68
	11600.00	90.48	180.00	7238.64	4348.79	-4299.51	-655.50	0.00	409139.85	572837.31	N 32 7 29.15 W	104 13 53.68
	11700.00	90.48	180.00	7237.80	4447.84	-4399.51	-655.51	0.00	409039.86	572837.30	N 32 7 28.16 W	104 13 53.69
	11800.00	90.48	180.00	7236.96	4546.89	-4499.51	-655.52	0.00	408939.88	572837.30	N 32 7 27.17 W	104 13 53.69
	11900.00	90.48	180.00	7236.12	4645.94	-4599.50	-655.52	0.00	408839.89	572837.29	N 32 7 26.18 W	104 13 53.69
	12000.00	90.48	180.00	7235.28	4745.00	-4699.50	-655.53	0.00	408739.90	572837.28	N 32 7 25.19 W	104 13 53.69
Cimarex Gadwall 18 Federal 5H - PBHL	12033.69	90.48	180.00	7235.00	4778.36	-4733.18	-655.53	0.00	408706.22	572837.28	N 32 7 24.86 W	104 13 53.69

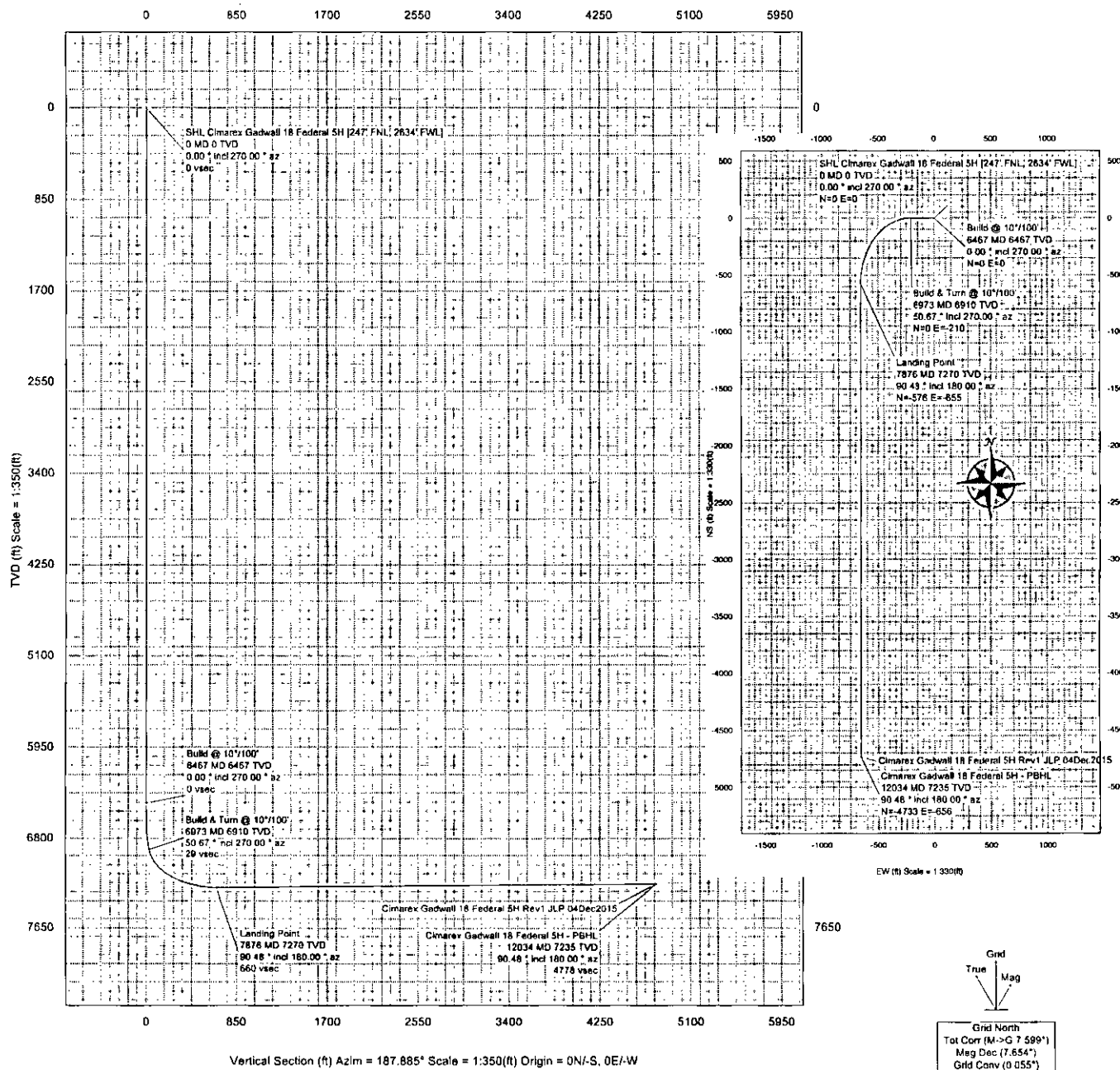
Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95 000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
-------------	------	-----------------	---------------	------------------	-------------------	----------------------------	------------------	-------------------

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Eastng (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
		1	0.000	12033.686	1/100.000	30.000	30.000	SLB_MWD-STD				
Original Borehole / Cimarex Gadwall 18 Federal 5H Rev1 JLP												

Borehole:	Well:	Field:	Structure:
Original Borehole	Gadwall 18 Federal 5H	NM Eddy County (NAD 83)	TBD
Gravity & Magnetic Parameters Model: +HGM 2014 Dip: 99.918° Date: 20-May-2015 Surface Location: NAD83 New Mexico State Plane, Eastern Zone, US Feet MagDec: 7.654° FS: 48208.61nT Gravity FS: 988.646mg (0.90665 Based) Lat: N 32 8 11.66 Northing: 413436.97NUS Grid Conv: 0.0553° Plan: Rev1 JLP 04Dec2015			



Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL Cimarex Gadwall 18 Federal 5H [247' FNL, 2634' FWL]	0.00	0.00	270.00	0.00	0.00	0.00	0.00	
Build @ 10°/100'	8466.80	0.00	270.00	8466.80	0.00	0.00	0.00	0.00
Build & Turn @ 10°/100'	6973.30	50.67	270.00	6906.78	29.79	0.00	-209.83	10.00
Landing Point	7876.37	90.48	180.00	7270.00	860.48	-578.01	-855.39	10.00
Cimarex Gadwall 18 Federal 5H - PBHL	12033.66	90.48	180.00	7235.00	4778.36	-4733.18	-855.53	0.00

CONTROLLED	
Drawn by	Cimarex Gadwall 18 Federal 5H Rev1 JLP 04Dec2015
Checked by	
Drawn number	01
Date	04-Dec-2015
Client	
Draw	
Check	
Draw	
Draw number	01