

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

S

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address CHI OPERATING, INC P.O. BOX 1799 MIDLAND, TEXAS 79702		00437 UL 1-8-2008 OCD-ARTESIA 30 - 309536432
Property Code 22955	Property Name WALLACE STATE	Well No. 4H
Proposed Pool 1 96960 LOGAN DRAW; WOLFCAMP (OIL)		Proposed Pool 2

Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	9	17S	27E	I	2180	S	10	E	EDDY

Proposed 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	9	17S	27E		2310	S	330	W	EDDY

Additional Well Information

Work Type Code NEW WELL	Well Type Code O	Cable/Rotary	Lease Type Code S	Ground Level Elevation 3375
Multiple N	Proposed Depth 10,763	Formation WOLFCAMP	Contractor PATTERSON	Spud Date ASAP once approved
Depth to Groundwater 75'		Distance from nearest fresh water well >1000		Distance from nearest surface water >1000
Pit: Liner: Synthetic ☐		Clay ☐ Pit Volume: _____ bbls		Drilling Method:
Closed-Loop System ☒		Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐		

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17.5	13.375	48	400 ✓	660	0
12.75	9.625	32	1800	625	0
8.75	7	26	TVD 5650' / 10763'	650	4000'

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Set 13.375" 48# casing @ 400' cement to surface.
Set 9.625" 32# casing @ 1800' cement to surface.
Set 7.0" 26# casing @ 5650' cement to 4000'.
Drill 6.125" hole to 90 deg. lateral at TVD of 5900'. Continue 6.125" lateral to MD of 10,763'. Run 4.5" liner with top at 5400'.

Proposed Blowout Prevention Program: Double Ram 5000 psi Cameron, Test Pressure 5000 psi.

NOTE: NEW PIT RULE

19-15-17 NMAC PART 17
A form C-144 must be approved
before starting drilling operations.

Complete to the
ing pit will be
ermit ☐, or

OIL CONSERVATION DIVISION

Approved by:

Jim W. Green
District II Supervisor

Title:

Approval Date: 7/19/08

Expiration Date: 7/19/10

Printed name: PAM CORBETT

Title: REGULATORY CLERK

E-mail Address: pamc@chienergyinc.com

Date: 6/11/08

Phone: 432-685-5001

Conditions of Approval Attached ☐

State of New Mexico
 Energy, Minerals & Natural Resources Department
 District I 1625 N. French Dr., Hobbs, NM 88240
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 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-102
 Revised October 12, 2005
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

1 API Number		2 Pool Code		3 Well Name		4 Property Code		5 Property Name		6 Well Number		7 OGRID No.		8 Operator Name		9 Elevation	
96960		011		Loran Draw Wolfcamp		22955		WALLACE STATE		4H		004378		CHI OPERATING, INC.		3375	

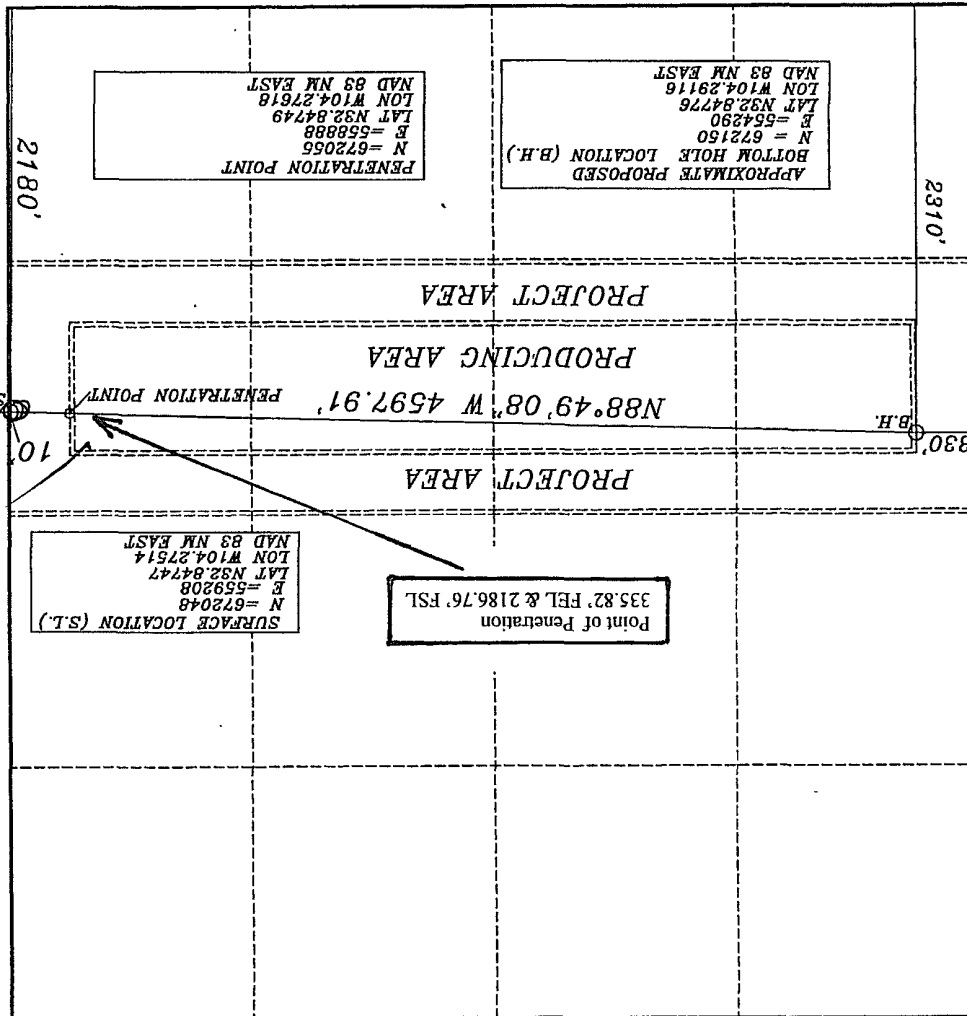
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	East/West line	County
I	9	17-S	27-E		2180	SOUTH	10	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	East/West line	County
L	9	17-S	27-E		2310	SOUTH	330	EDDY

Dedicated Acreage		13 Joint or Infill		14 Consolidation Code		15 Order No.	
160							

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 OPERATORS CERTIFICATION		18 SURVEYOR CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this information either comes from a working interest or unleased interest in the land underlying the proposed bottom hole location or has a right to drill this well and the location provided to a contract with an owner of such mineral or working interest or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.		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.	
Signature		Date of Survey	
Date		May 2, 2006	
Printed Name		DAN R. REDDY	
Professional Engineer		Professional Engineer	
Certificate Number		DAN R. REDDY NM PE&PS #5412	



Planned Wellpath Report

Plan #1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Chi Energy, Inc.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Oxy Wallace)Section 9, T17S, R27E	Wellbore	No. 4H PWB
Facility	Wallace State No. 4H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999909	Report Generated	5/28/2008 at 5:10:56 PM
Convergence at slot	0.03° East	Database/Source file	WA_Midland/No. 4H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	559208.00	672048.00	32°50'50.895"N	104°16'30.514"W
Facility Reference Pt			559208.00	672048.00	32°50'50.895"N	104°16'30.514"W
Field Reference Pt			559208.00	672048.00	32°50'50.895"N	104°16'30.514"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 4H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No. 4H SHL (RT) to Mean Sea Level	3375.00ft
Vertical Reference Pt	Rig on No. 4H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 4H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	271.19°



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Facility	Wallace State No. 4H			

WELLPATH DATA (55 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [serv ft]	Grid North [serv ft]	DLS [°/100ft]	Comments
0.00	0.000	271.188	0.00	0.00	0.00	0.00	559208.00	672048.00	0.00	Tie On
5660.00	0.000	271.188	5660.00	0.00	0.00	0.00	559208.00	672048.00	0.00	EST. KOP
5760.00†	17.892	271.188	5758.38	15.49	0.32	-15.48	559192.52	672048.32	17.89	
5860.00†	35.784	271.188	5847.25	60.45	1.25	-60.44	559147.57	672049.25	17.89	
5960.00†	53.676	271.188	5918.07	130.54	2.17	-130.53	559072.50	672050.17	17.89	
6060.00†	71.568	271.188	5963.80	218.98	4.54	-218.93	558989.09	672052.54	17.89	
6160.00†	89.460	271.188	5980.22	317.21	6.58	-317.14	558890.88	672054.58	17.89	
6168.61	91.000	271.188	5980.18	325.82	6.76	-325.75	558882.28	672054.76	17.89	EOC @ 91° INC
6260.00†	91.000	271.188	5978.59	417.20	8.65	-417.11	558790.93	672056.65	0.00	
6360.00†	91.000	271.188	5973.89	517.13	10.72	-517.00	558697.98	672058.22	0.00	
6460.00†	91.000	271.188	5975.10	617.17	12.80	-617.04	558591.02	672060.80	0.00	
6560.00†	91.000	271.188	5973.33	717.15	14.87	-717.00	558491.07	672062.87	0.00	
6660.00†	91.000	271.188	5971.61	817.14	16.94	-816.96	558391.11	672064.94	0.00	
6760.00†	91.000	271.188	5969.86	917.12	19.02	-916.93	558291.16	672067.02	0.00	
6860.00†	91.000	271.188	5968.12	1017.11	21.09	-1016.89	558191.21	672069.10	0.00	
6960.00†	91.000	271.188	5966.37	1117.09	23.16	-1116.85	558091.25	672071.16	0.00	
7060.00†	91.000	271.188	5964.63	1217.08	25.24	-1216.82	557991.30	672073.23	0.00	
7160.00†	91.000	271.188	5962.88	1317.06	27.31	-1316.78	557891.34	672075.31	0.00	
7260.00†	91.000	271.188	5961.14	1417.05	29.38	-1416.74	557791.39	672077.38	0.00	
7360.00†	91.000	271.188	5959.39	1517.03	31.46	-1516.70	557691.44	672079.45	0.00	
7460.00†	91.000	271.188	5957.65	1617.02	33.53	-1616.67	557591.48	672081.53	0.00	
7560.00†	91.000	271.188	5955.90	1717.00	35.60	-1716.63	557491.53	672083.60	0.00	
7660.00†	91.000	271.188	5954.15	1816.99	37.68	-1816.59	557391.57	672085.67	0.00	
7760.00†	91.000	271.188	5952.41	1916.97	39.75	-1916.56	557291.62	672087.75	0.00	
7860.00†	91.000	271.188	5950.66	2016.95	41.82	-2016.52	557191.67	672089.82	0.00	
7960.00†	91.000	271.188	5948.92	2116.94	43.90	-2116.48	557091.71	672091.89	0.00	
8060.00†	91.000	271.188	5947.17	2216.92	45.97	-2216.45	556991.76	672093.97	0.00	
8160.00†	91.000	271.188	5945.43	2316.91	48.04	-2316.41	556891.80	672096.04	0.00	
8260.00†	91.000	271.188	5943.68	2416.89	50.12	-2416.37	556791.85	672098.11	0.00	
8360.00†	91.000	271.188	5941.94	2516.88	52.19	-2516.34	556691.90	672100.18	0.00	

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Planned Wellpath Report

Plan #1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chi Energy, Inc.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Oxy Wallace)Section 9, T17S, R27E	Wellbore	No. 4H PWB
Facility	Wallace State No. 4H		

WELLPATH DATA (55 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [serv ft]	Grid North [serv ft]	DLS [°/100ft]	Comments
8460.00†	91.000	271.188	5940.19	2616.86	54.26	-2616.30	556591.94	672102.26	0.00	
8560.00†	91.000	271.188	5938.45	2716.85	56.34	-2716.26	556491.99	672104.33	0.00	
8660.00†	91.000	271.188	5936.70	2816.83	58.41	-2816.23	556392.03	672106.40	0.00	
8760.00†	91.000	271.188	5934.96	2916.82	60.48	-2916.19	556292.08	672108.48	0.00	
8860.00†	91.000	271.188	5933.21	3016.80	62.56	-3016.15	556192.13	672110.55	0.00	
8960.00†	91.000	271.188	5931.47	3116.79	64.63	-3116.12	556092.17	672112.62	0.00	
9060.00†	91.000	271.188	5929.72	3216.77	66.70	-3216.08	555992.22	672114.70	0.00	
9160.00†	91.000	271.188	5927.98	3316.76	68.78	-3316.04	555892.26	672116.77	0.00	
9260.00†	91.000	271.188	5926.23	3416.74	70.85	-3416.01	555792.31	672118.84	0.00	
9360.00†	91.000	271.188	5924.49	3516.73	72.92	-3515.97	555692.36	672120.91	0.00	
9460.00†	91.000	271.188	5922.74	3616.71	74.99	-3615.93	555592.40	672122.99	0.00	
9560.00†	91.000	271.188	5921.00	3716.70	77.07	-3715.90	555492.45	672125.06	0.00	
9660.00†	91.000	271.188	5919.25	3816.68	79.14	-3815.86	555392.49	672127.13	0.00	
9760.00†	91.000	271.188	5917.50	3916.67	81.21	-3915.82	555292.54	672129.21	0.00	
9860.00†	91.000	271.188	5915.76	4016.65	83.28	-4015.79	555192.58	672131.28	0.00	
9960.00†	91.000	271.188	5914.01	4116.64	85.36	-4115.75	555092.63	672133.35	0.00	
10060.00†	91.000	271.188	5912.27	4216.62	87.43	-4215.71	554992.68	672135.43	0.00	
10160.00†	91.000	271.188	5910.52	4316.60	89.51	-4315.68	554892.72	672137.50	0.00	
10260.00†	91.000	271.188	5908.78	4416.59	91.58	-4415.64	554792.77	672139.57	0.00	
10360.00†	91.000	271.188	5907.03	4516.57	93.65	-4515.60	554692.81	672141.65	0.00	
10460.00†	91.000	271.188	5905.29	4616.56	95.73	-4615.57	554592.86	672143.72	0.00	
10560.00†	91.000	271.188	5903.54	4716.54	97.80	-4715.53	554492.91	672145.79	0.00	
10660.00†	91.000	271.188	5901.80	4816.53	99.87	-4815.49	554392.95	672147.86	0.00	
10760.00†	91.000	271.188	5900.05	4916.51	101.95	-4915.46	554293.00	672149.94	0.00	
10763.00	91.000	271.188	5900.00	4919.51	102.01	-4918.46	554290.00	672150.00	0.00	



Planned Wellpath Report

Plan #1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Chi Energy, Inc.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	(Oxy Wallace)Section 9, T17S, R27E	Wellbore	No. 4H PWB
Facility	Wallace State No. 4H		

HOLE & CASING SECTIONS Ref Wellbore: No. 4H PWB Ref Wellpath: Plan #1

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
8.625in Casing	0.00	1800.00	1800.00	0.00	1800.00	0.00	0.00	0.00	0.00
6.125in Open Hole	0.00	5660.00	5660.00	0.00	5660.00	0.00	0.00	0.00	0.00
6.125in Open Hole	5660.00	10763.00	5103.00	5660.00	5900.00	0.00	0.00	102.01	-4918.46

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 4H BHL	10763.00	5900.00	102.01	-4918.46	554290.00	672150.00	32°50'51.927"N	104°17'28.164"W	point

SURVEY PROGRAM Ref Wellbore: No. 4H PWB Ref Wellpath: Plan #1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	10763.00	NaviTrak (Standard)		No. 4H PWB



Chi Energy, Inc.

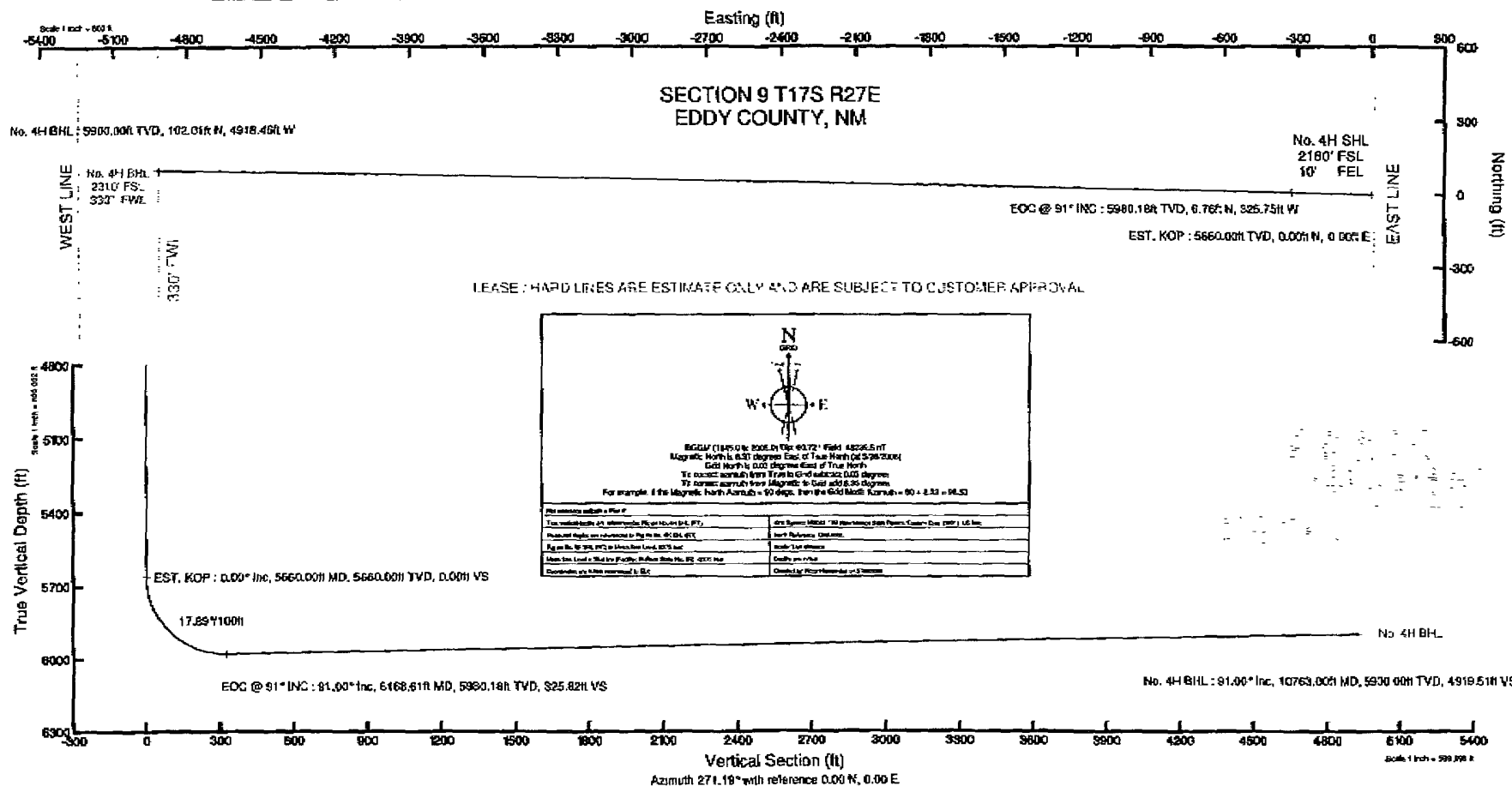
Location: Eddy County, NM
Field: (Oxy Wallace) Section 9, T17S, R27E
Facility: Wallace State No. 4H

Slot: No. 4H SHL
Well: No. 4H
Wellbore: No. 4H PWB

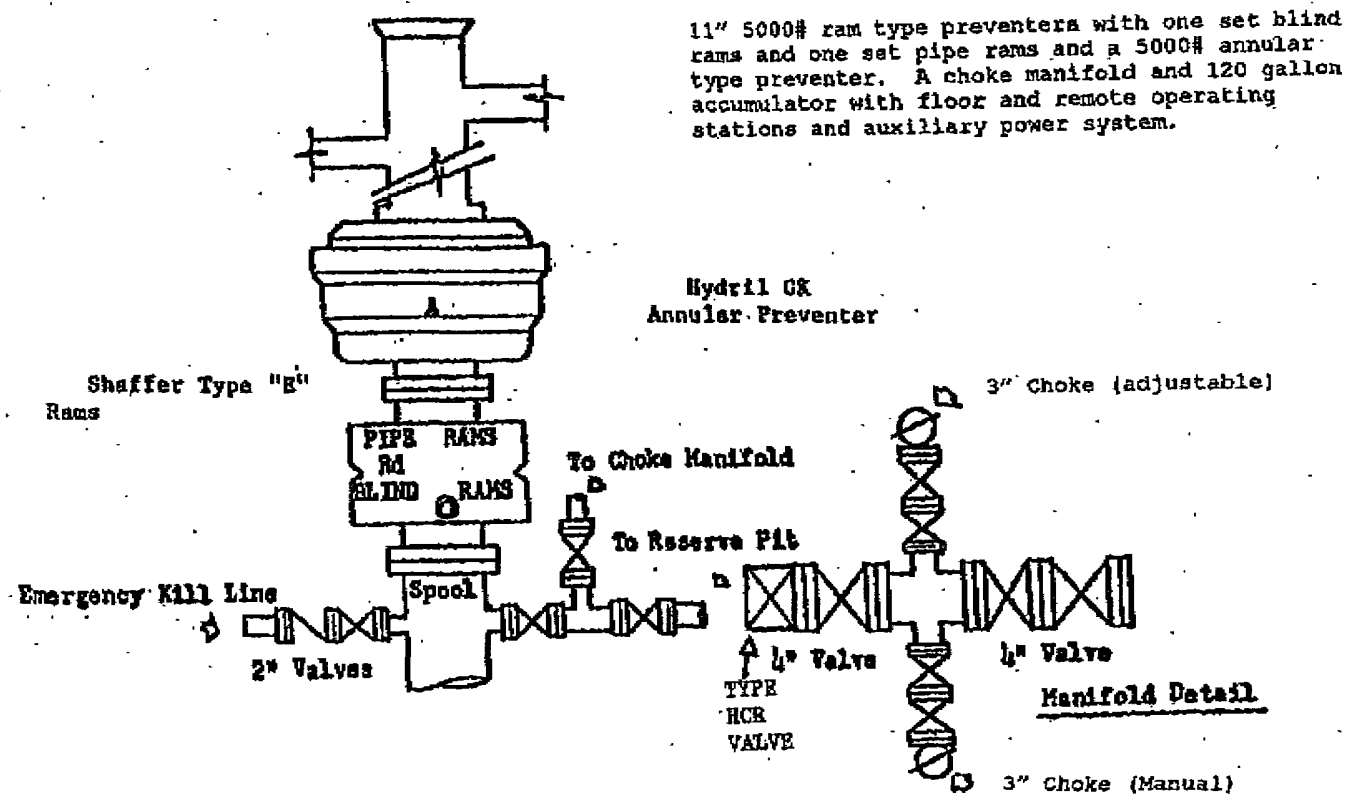


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	271.188	0.00	0.00	0.00	0.00	0.00
EST. KOP	5660.00	0.000	271.188	5660.00	0.00	0.00	0.00	0.00
EOC @ 91° INC	6168.61	91.000	271.188	5980.18	6.76	-325.75	17.89	325.82
No. 4H BHL	10763.00	91.000	271.188	5900.00	102.01	-4918.46	0.00	4919.51



BLOWOUT PREVENTOR SCHEME



Choke Manifold