TCG 8-8-2014

Form 3160-3
(March 2012)

SECRETARY'S POTASH Operator Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

5. Lease Serial No.
SHL-NM-111959 BHL-LC-062376

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
FREEWAY FEDERAL COM 2H <313570

2. Name of Operator CHI OPERATING,INC. <4378>

9. API Well No.
30-015-42565

3a. Address P. O. BOX 1799
MIDLAND, TX. 79702

3b. Phone No. *(include area code)*
432-634-8958 (GARY WOMACK)

10. Field and Pool or Exploratory
~~UNDESIGNATED BONE SPRING~~ Parkway; B.S. <49622>

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 330 FNL & 200 FWL
At proposed prod. zone 330 FNL & 330 FEL

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 30, T. 19 S., R. 30 E.

14. Distance in miles and direction from nearest town or post office*
13 MILES NORTHEAST OF CARLSBAD, NM

12. County or Parish
EDDY

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
BHL: 330' SHL: 200'	SHL: 316.97 BHL: 1920	159.82 22
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
BHL: 1320' SHL: 990' Horizontal 186'	MD: ~~13,120~~ 12751 TVD: ~~8,600~~ 8285	NM-1616
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3356.8' GL		32 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Barry W. Hunt	BARRY W. HUNT	9/10/12

Title
PERMIT AGENT FOR CHI OPERATING, INC.

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ George MacDonell	/s/George MacDonell	3/14/14
Title FIELD MANAGER	**Office** CARLSBAD FIELD OFFICE	

Application approval 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.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 06 2014
RECEIVED

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct, and that 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 CHI Operating, Inc. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 10th day of September 2012.

Signed: Barry W. Hunt

Printed Name: Barry Hunt
Position: Agent for CHI Operating, Inc.
Address: 1403 Springs Farm Place, Carlsbad, NM 88220
Telephone: (575) 361-4078
E-mail: specialtpermitting@gmail.com
Field Representative: Gary Womack, CHI Operating, Inc.
Address: P.O. Box 1799, Midland, Tx. 79702
Telephone:(432) 634-8958

(432) 685-5001 Fax (432) 687-2662

Chi Operating, Inc.

P. O. BOX 1799
MIDLAND, TEXAS 79702

August 27, 2012

Re: Authorization to Permit for Drilling and Right Of Way

To Whom it may concern,

Chi Operating, Inc. hereby authorizes Mr. Barry Hunt to serve as an agent for the purpose of permitting and obtaining Federal authority.

Gary Womack

Chi Energy, Inc.

432-634-8958 (C)
432-685-5001 (O)

District I
1625 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

☐ AMENDED REPORT

3/19-8-4

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-42569	49622	~~Undesignated~~ Parkway Bone Spring
4 Property Code	**5 Property Name**	**6 Well Number**
313572	FREEWAY FEDERAL COM	2H
7 OGRID No.	**8 Operator Name**	**9 Elevation**
4378	CHI OPERATING, INC.	3356.8

10 Surface Location

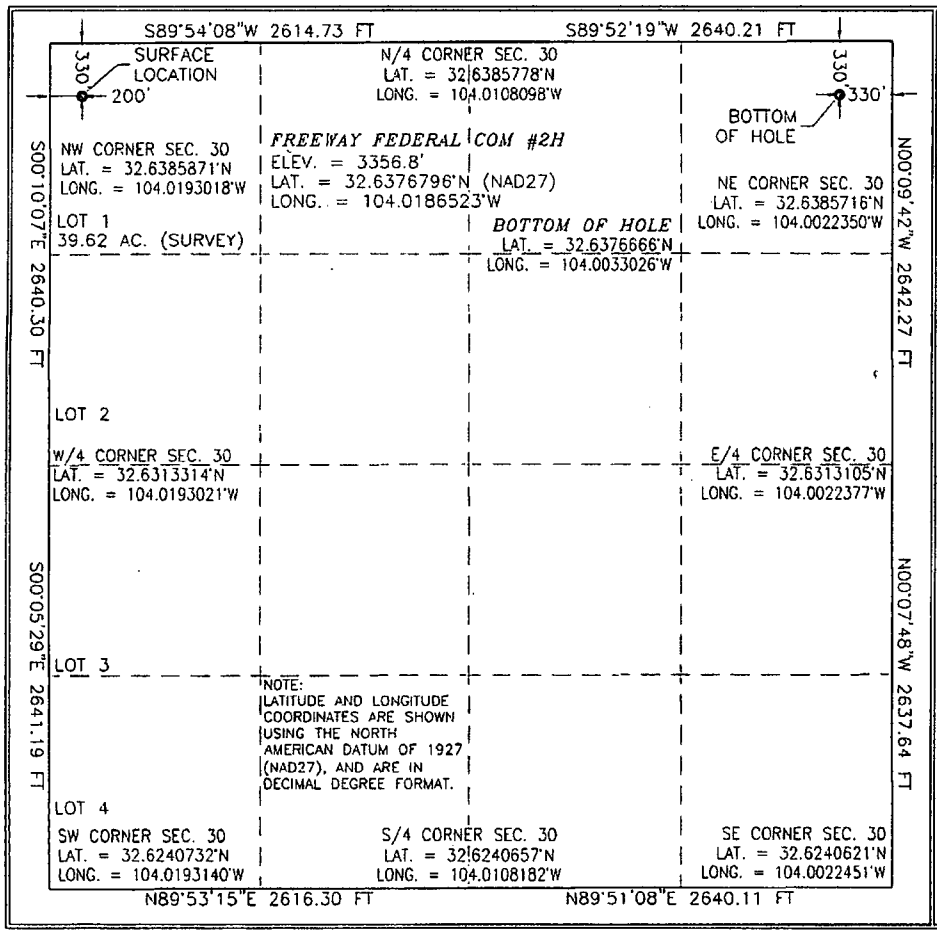
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	30	19 S	30 E		330	NORTH	200	WEST	EDDY

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
A	30	19 S	30 E		330	NORTH	330	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
159.82			

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.

Barry W. Hunt 9/10/12
Signature Date

Barry W. Hunt
Printed Name

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.

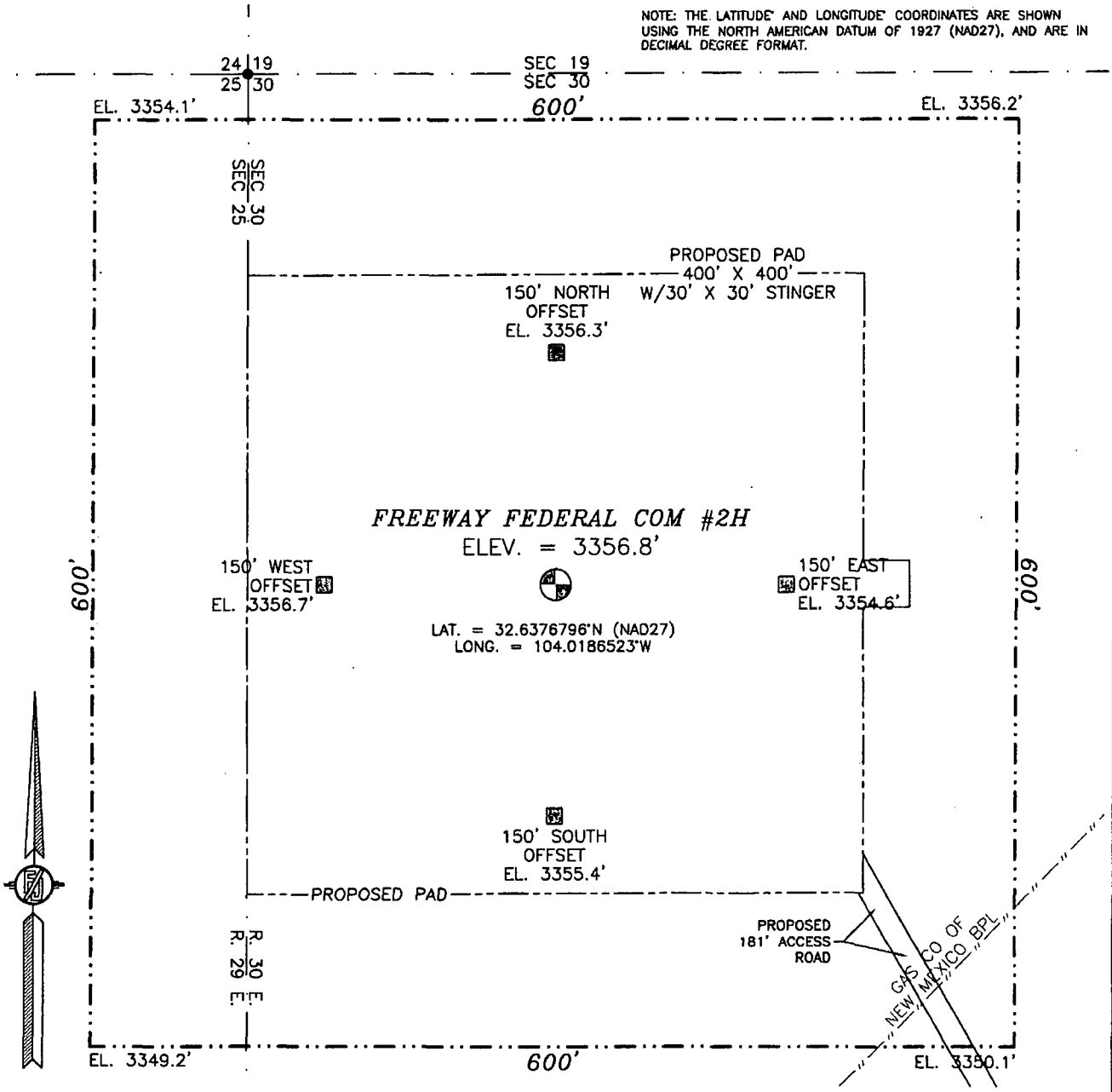
JUNE 5, 2012
Date of Survey

Signature and Seal of Professional Surveyor

FRANK F. JARAMILLO
NEW MEXICO
REGISTERED LAND SURVEYOR

Certificate Number: FILIMON F. JARAMILLO, PLS 12797
SURVEY NO. 1119

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. 210 (OLD LOCO) AND CO. RD. 235 (CURRY COMB) GO SE ON 235 FOR APPROX. 3.9 MILES. GO NORTH APPROX 0.4 OF A MILE. LOCATION IS APPROX 500' EAST.

CHI OPERATING, INC.

FREEWAY FEDERAL COM #2H

LOCATED 330 FT. FROM THE NORTH LINE AND 200 FT. FROM THE WEST LINE OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

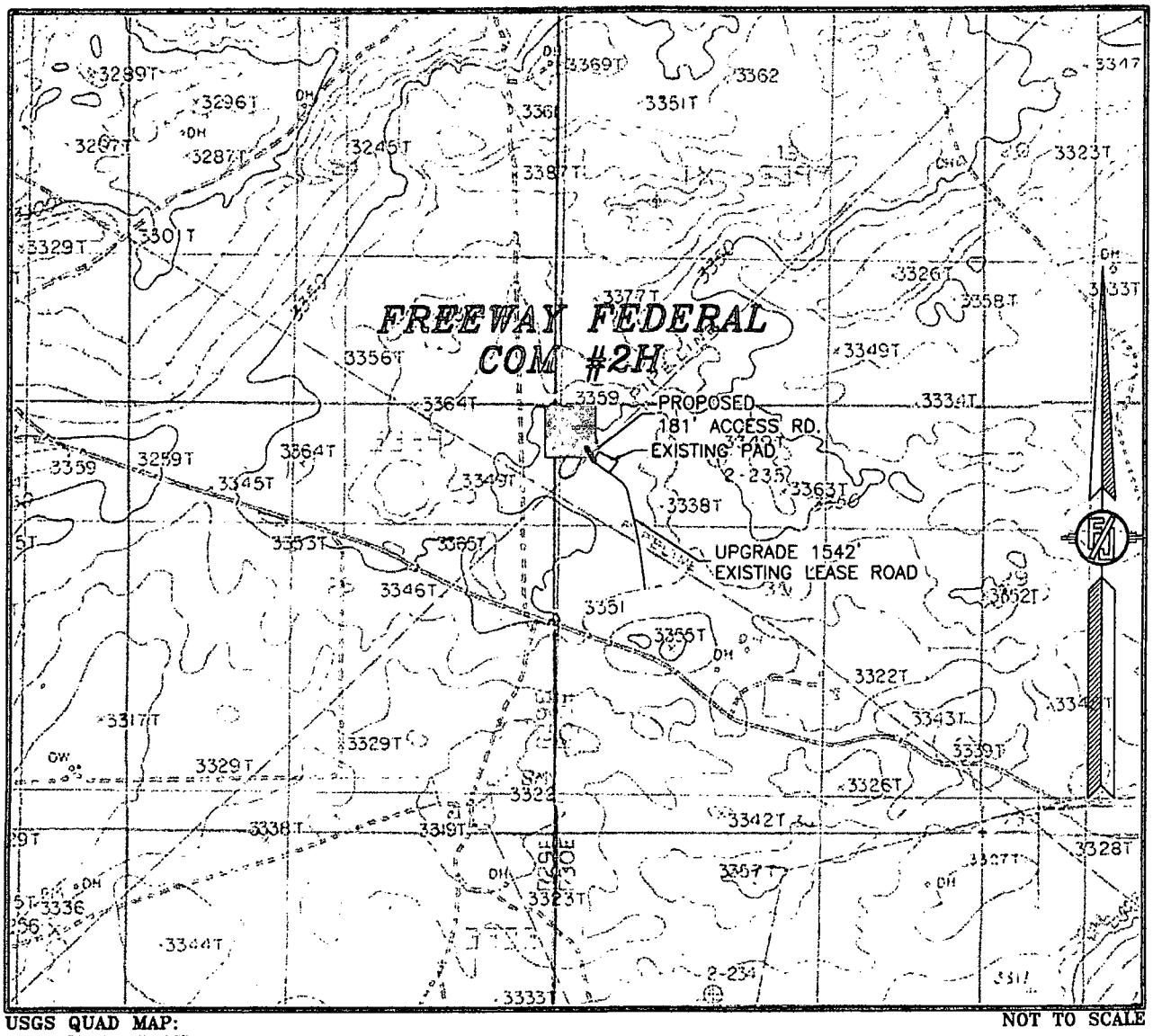
JUNE 5, 2012

SURVEY NO. 1119

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

LOCATION VERIFICATION MAP



USGS QUAD MAP:
ILLINOIS CAMP NE

NOT TO SCALE

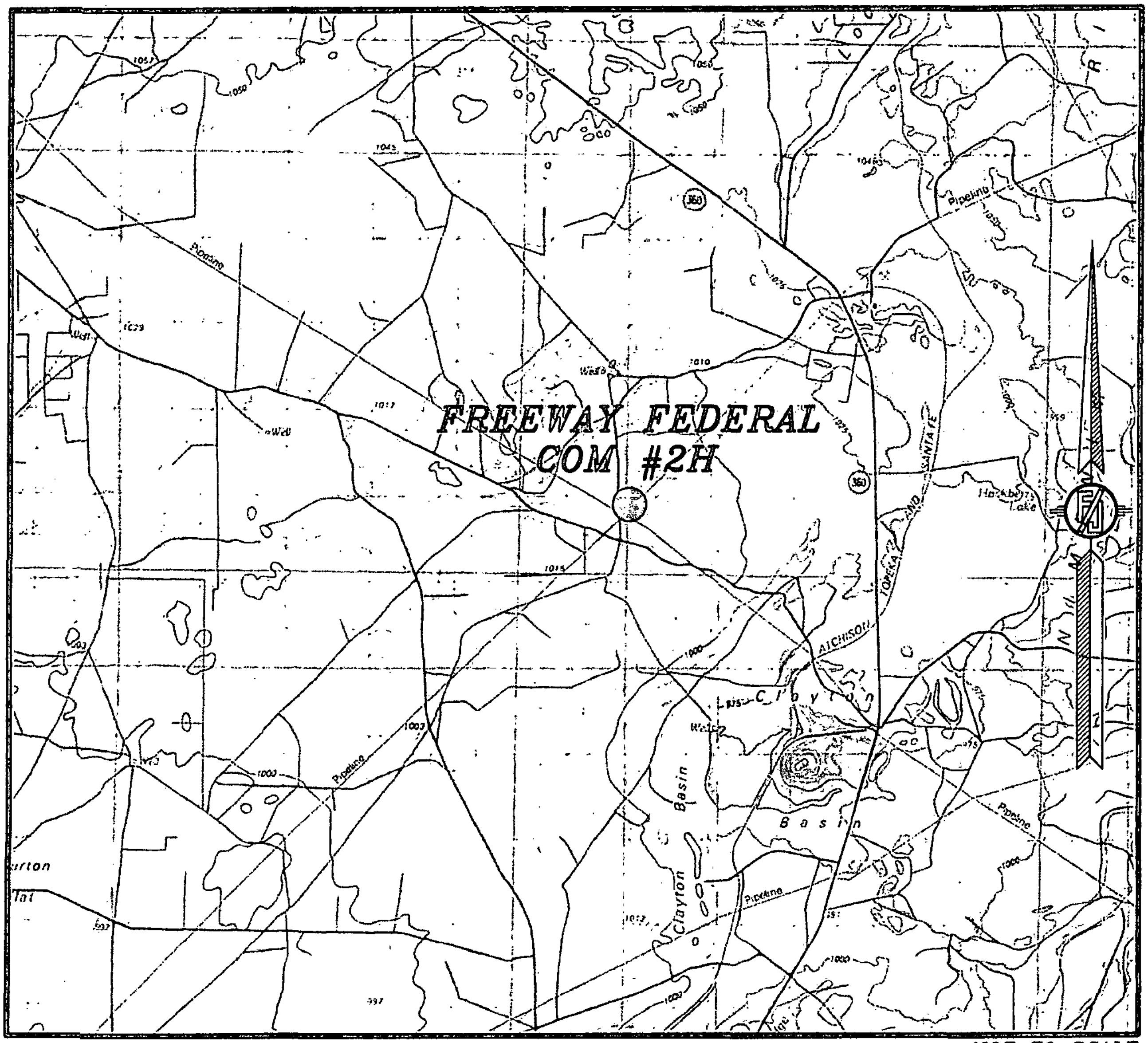
CHI OPERATING, INC.
FREEWAY FEDERAL COM #2H
LOCATED 330 FT. FROM THE NORTH LINE
AND 200 FT. FROM THE WEST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JUNE 5, 2012

SURVEY NO. 1119
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

VICINITY MAP



NOT TO SCALE

CHI OPERATING, INC.

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RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

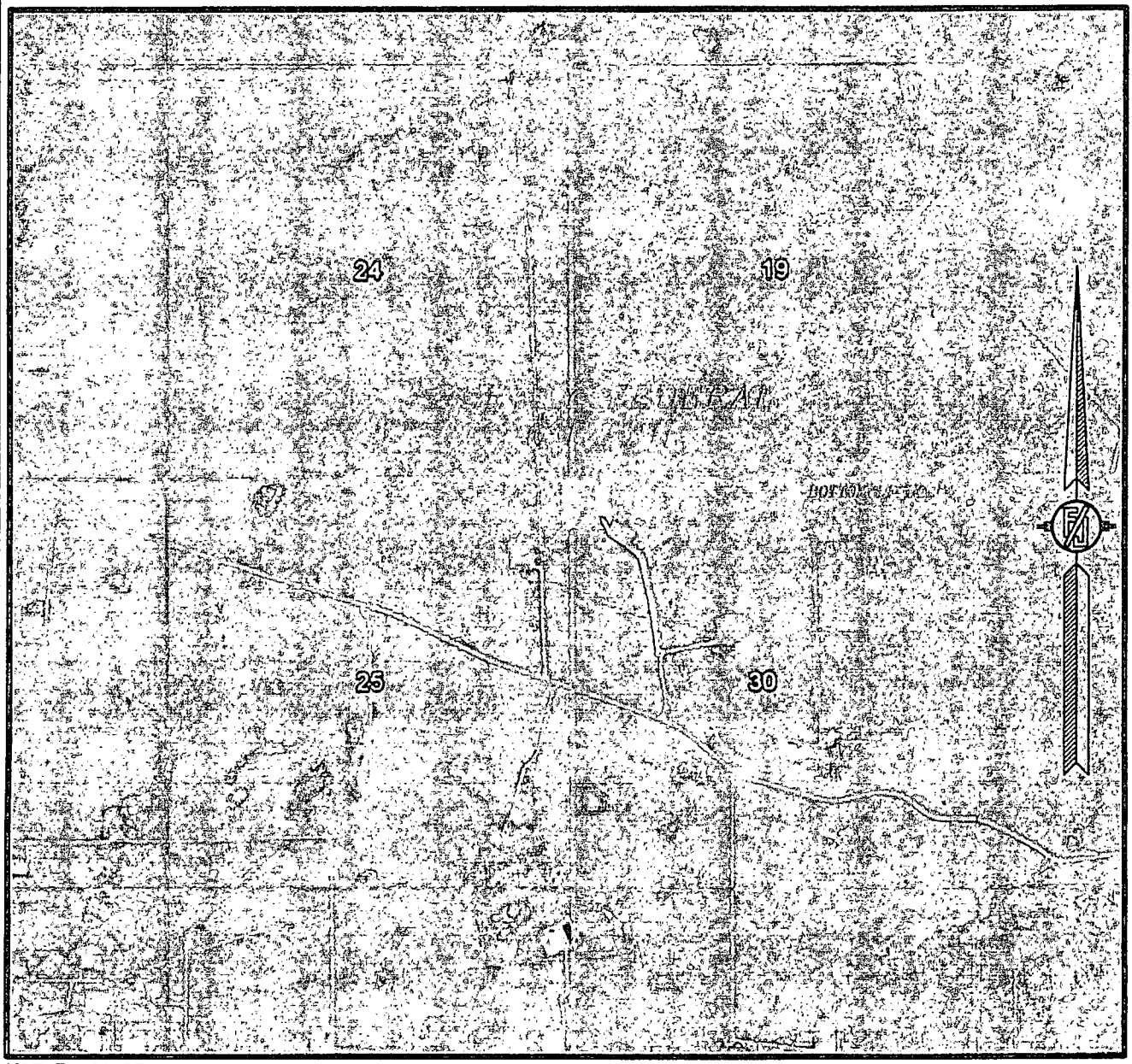
JUNE 5, 2012

SURVEY NO. 1119

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
JULY 2011

CHI OPERATING, INC.

FREEWAY FEDERAL COM #2H

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AND 200 FT. FROM THE WEST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JUNE 5, 2012

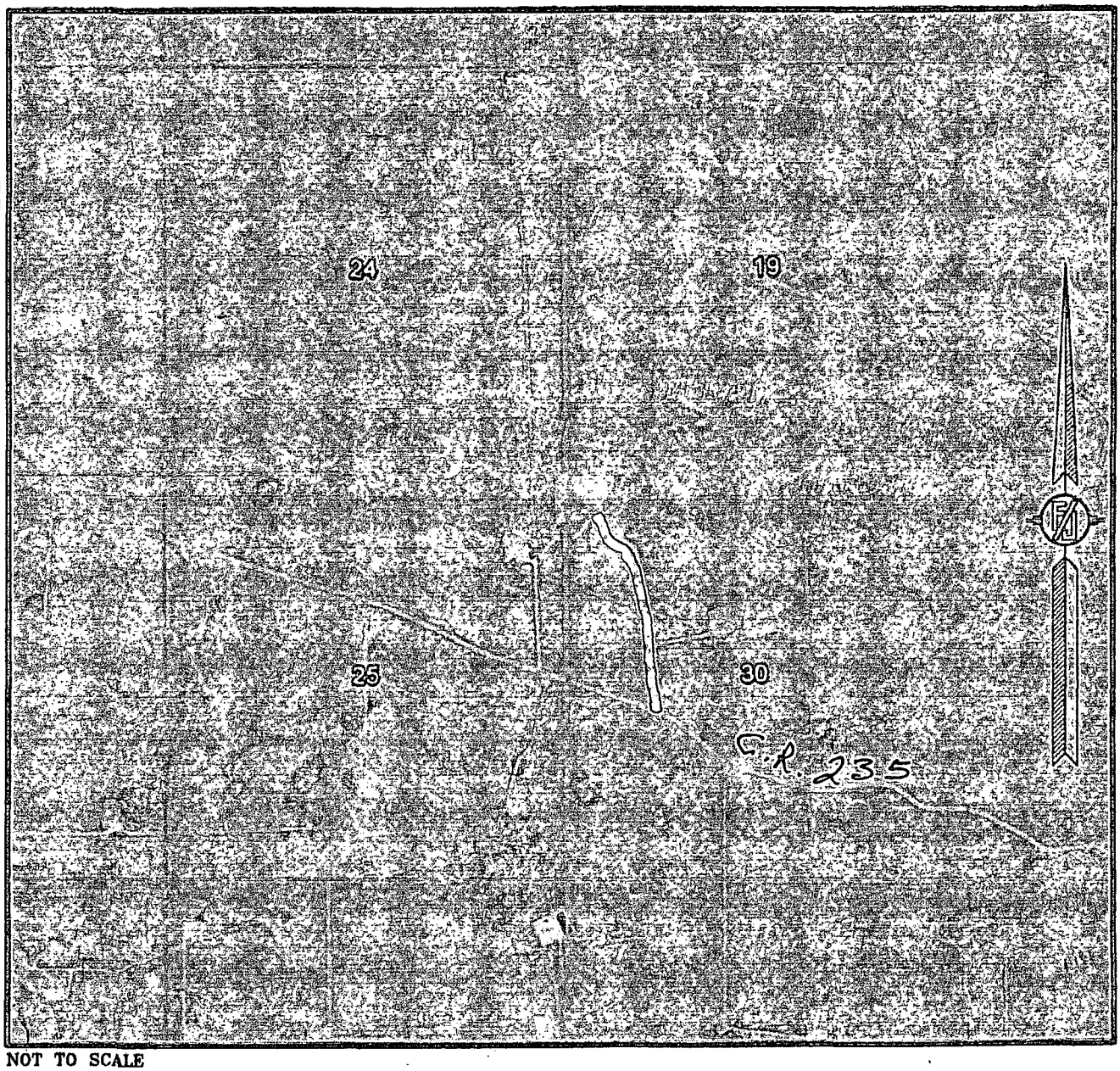
SURVEY NO. 1119

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

Exhibit A Access

SECTION 30, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
JULY 2011

CHI OPERATING, INC.
FREEWAY FEDERAL COM #2H
LOCATED 330 FT. FROM THE NORTH LINE
AND 200 FT. FROM THE WEST LINE OF
SECTION 30, TOWNSHIP 19 SOUTH,
RANGE 30 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JUNE 5, 2012

SURVEY NO. 1119

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

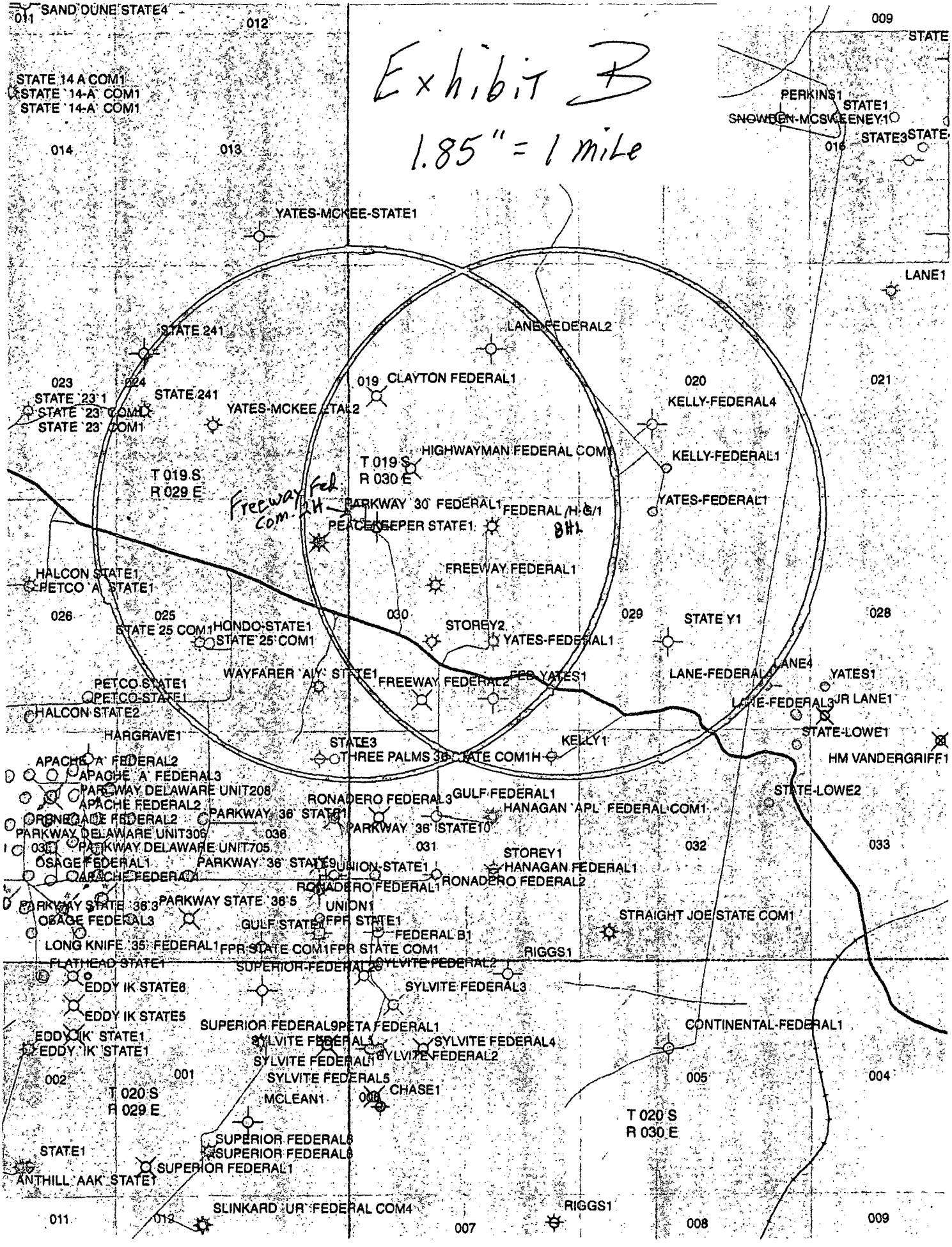


Exhibit B
1.85" = 1 mile
SAND DUNE STATE4
STATE 14 A COM1
STATE 14-A COM1
STATE 14-A COM1
PERKINS1
STATE1
SNOWDEN-MCSWEENEY1
STATE3
YATES-MCKEE-STATE1
LANE1
STATE 241
LANE-FEDERAL2
CLAYTON FEDERAL1
KELLY-FEDERAL4
STATE 23 1
STATE 23 COM1
STATE 23 COM1
YATES-MCKEE-STATE2
HIGHWAYMAN FEDERAL COM1
KELLY-FEDERAL1
T 019 S
R 029 E
T 019 S
R 030 E
Freeway Fed. Com. 1H
PARKWAY 30 FEDERAL1
FEDERAL H G/1
YATES-FEDERAL1
PEACEKEEPER STATE1
FREEWAY FEDERAL1
HALCON STATE1
PETCO A STATE1
STATE 25 COM1
HONDO-STATE1
STATE 25 COM1
STOREY2
YATES-FEDERAL1
STATE Y1
WAYFARER AIV STATE1
FREEWAY FEDERAL2
FED YATES1
LANE-FEDERAL
LANE4
YATES1
JR LANE1
PETCO STATE1
PETCO STATE1
HALCON STATE2
LANE-FEDERAL3
STATE-LOWE1
HARGRAVE1
STATE3
THREE PALMS 36 STATE COM1H
KELLY1
HM VANDERGRIFF1
APACHE A FEDERAL2
APACHE A FEDERAL3
PARKWAY DELAWARE UNIT208
APACHE FEDERAL2
RONADERO FEDERAL3
GULF FEDERAL1
HANAGAN APL FEDERAL COM1
STATE-LOWE2
ORNERADE FEDERAL2
PARKWAY 36 STATE1
PARKWAY DELAWARE UNIT306
PARKWAY 36 STATE10
PARKWAY DELAWARE UNIT705
OSAGE FEDERAL1
PARKWAY 36 STATE9
UNION-STATE1
STOREY1
HANAGAN FEDERAL1
APACHE FEDERAL1
RONADERO FEDERAL1
RONADERO FEDERAL2
PARKWAY STATE 36 3
PARKWAY STATE 36 5
UNION1
STRAIGHT JOE STATE COM1
OSAGE FEDERAL3
GULF STATE1
FPR STATE1
FEDERAL B1
LONG KNIFE 35 FEDERAL1
FPR STATE COM1
FPR STATE COM1
RIGGS1
FLATHEAD STATE1
SUPERIOR FEDERAL2
SYLVITE FEDERAL2
EDDY IK STATE6
SYLVITE FEDERAL3
EDDY IK STATE5
SUPERIOR FEDERAL9
PETA FEDERAL1
CONTINENTAL-FEDERAL1
EDDY IK STATE1
EDDY IK STATE1
SYLVITE FEDERAL3
SYLVITE FEDERAL4
SYLVITE FEDERAL2
SYLVITE FEDERAL1
SYLVITE FEDERAL5
CHASE1
MCLEAN1
T 020 S
R 029 E
T 020 S
R 030 E
SUPERIOR FEDERAL8
SUPERIOR FEDERAL8
STATE1
SUPERIOR FEDERAL1
ANTHILL AAK STATE1
SLINKARD UR FEDERAL COM4
RIGGS1
011
012
013
014
009
016
023
024
019
020
021
026
025
030
029
028
031
032
033
036
001
002
005
004
007
008
009

Application to Drill
Chi Operating, Inc.
Freeway Federal Com #2H
330'FNL & 200' FWL (SHL)
330' FNL & 330' FEL (BHL)
Sec 30-T19S-R30E
Eddy County, New Mexico

1. **The estimated tops of geological markers are as follows:**

Rustler	150'
Top Salt	310'
Base Salt	950'
*Yates	1250' – 660' thick ??
Seven Rivers	Not Present
Queen	Not Present
Top Capitan	1910'
Base Capitan	3580'
*Bone Springs	6020'
TVD	8285'

2. **Estimated depths of anticipated fresh water, oil, or gas:**

Water	Fresh water is anticipated at 65' and will be protected by setting surface Casing at 185' and cementing to surface.
Hydrocarbons	Oil and gas are anticipated in the above (*) formations. These zones will Be protected by casing as necessary.

3. **Pressure control equipment:**

See COA

A 2M diverter will be installed after running 20" casing. A 2000# WP Annular will be installed after running 13 3/8" casing. A 3000# WP Double Ram BOP and 3000# WP Annular will be installed after running 9 5/8" & 7" casing strings. Pressure tests will be conducted prior to drilling out under all casing strings. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOPE will be inspected and operated as recommended in Onshore Order #2. A kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use.
will test the 7" & 9 5/8" BOPE to 3000# and both Annular BOPs to 1500# with a third party testing company before drilling below each shoe, but will test again, if needed, in 30 days from the 1st test as per BLM Onshore Oil and Gas Order #2.

CHI ENERGY REQUESTS A VARIANCE TO INSTALL a ~~THAT A DIVERTER BE INSTALLED.~~

4. Chi Operating, Inc. proposes to drill a vertical wellbore to approximately 7682' & kick off to horizontal @ 8285' TVD. The well will be drilled to 12751' MD (8285' TVD). See attached directional plan.

5. **Proposed casing and cementing program:**

A. Casing Program:

per Gary Womack 4/15/13

See COA

Hole Size	Casing	Wt/Ft.	Grade	Depth	Jt Type
26	20" (new)	94#	J55	0'-~~185'~~ 350'	BT&C
17 ½"	13 3/8" (new)	~~48#~~ 54.5#	~~H40~~ J55	0'-~~1300'~~ 1650'	ST&C
12 ¼"	9 5/8"(new)	36#	J55	0'-~~3700'~~ 3650'	LT&C
8 ¾"	7" (new)	26#	P110	0'-8400' MD	LT&C
6 1/8"	4 1/2" (new)	11.6#	P110	8400 -12751' MD	LT&C

See COA – overlap required,

Minimum casing design factors: Collapse 1.125, Burst 1.0, Tensile strength 1.8
*Subject to availability of casing

B. **Cementing Program:**

20" i. Surface Casing: 350 sks Class "C" lite (35:65:4) cement w/LCM additives. Yield at 2. 12 cuft/sk. 200 sks Class "C" cement w/2% CaCl2 additives. Yield at 1.34 cuft/sk. Cmt circulated to surface w/100% excess.

13 3/8" ii. 1st Intermediate Casing: 450 sks Clas "C" lite (35:65:4) cement w/salt & LCMadditives. Yield at 2. 12 cuft/sk. 200 sacks Class "C" cement w/2% CaCl2 additives.Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.

9 5/8" iii. 2nd Intermediate Casing: 500 sacks Class "C" lite (35:65:4) cement w/LCM & FLadditives. Yield at 2. 12 cuft/sk. 200 sacks Class "C" cement w/1% CaCl2 additives.Yield at 1.34 cuft/sk. Cmt circulated to surface w/25% excess.

7" iv. Production Casing: 450 sacks Class "H" lite (35:65:4) cement w/salt,FL & LCMadditives. Yield at 2. 12 cuft/sk. 400 sacks Class "H" cement w/salt & FL additives.Yield at 1.29 cuft/sk. Cmt circulated to surface w/25% excess.

4 1/2" v. Production Liner: This will be a Packer/Port completion from TD up inside 7" casingwith packer type liner hanger.

See COA

*Referring to above of lite cement:)wt% fly ash : wt% cement : wt% bentonite of the total of the first two numbers). Generic names of additives are used since the availability of specific companies and products are unknown at this time.

6. **Mud Program:**

Interval	Type System	Weight	Viscosity	Fluid Loss
0'-185' 350'	FW Spud Mud	8.6-9.0	32-34	NA
185'-1300' 1650'	Brine Water	10.0-10.2	28-30	NA
1300'-8400' 3650 8900 FW	Cut Brine	8.3-8.6	28-30	NA
8400'- TD	Cut Brine w/Polymer	8.5-8.7	32-35	15

See COA

7. **Evaluation Program:**

Samples: 10' samples from surface casing to TD
Logging: GR/N & Gyro from KOP-100' (7388') to surface. GR from 8400' to TD.

8. **Downhole Conditions:**

Zones of abnormal pressure: None anticipated
Zones of lost circulation: Anticipated in surface and intermediate holes. Equipment and material will be available on location in the event of lost circulation.
Maximum bottom hole temperature: 120 degrees F
Maximum bottom hole pressure: 3563 psi.

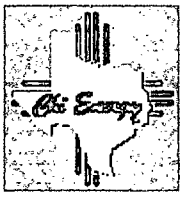
9. **Anticipated Starting Date:**

Chi Operating, Inc. intends to drill this well as soon as possible after receiving approval with approximately 40 days involved in drilling operations and an additional 10 days involved in completions operations on the project.

Weatherford

Drilling Services

Proposal



FREEWAY FEDERAL COM #2H

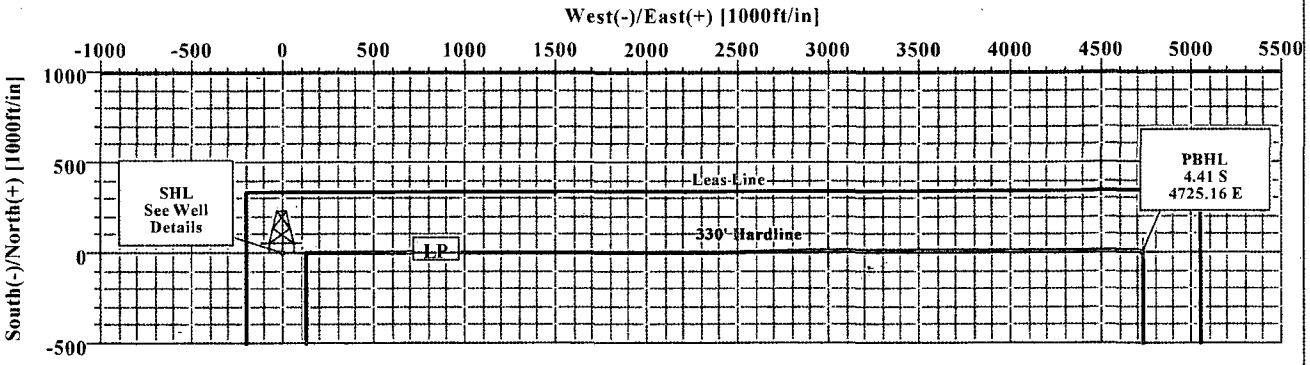
EDDY CO., NM

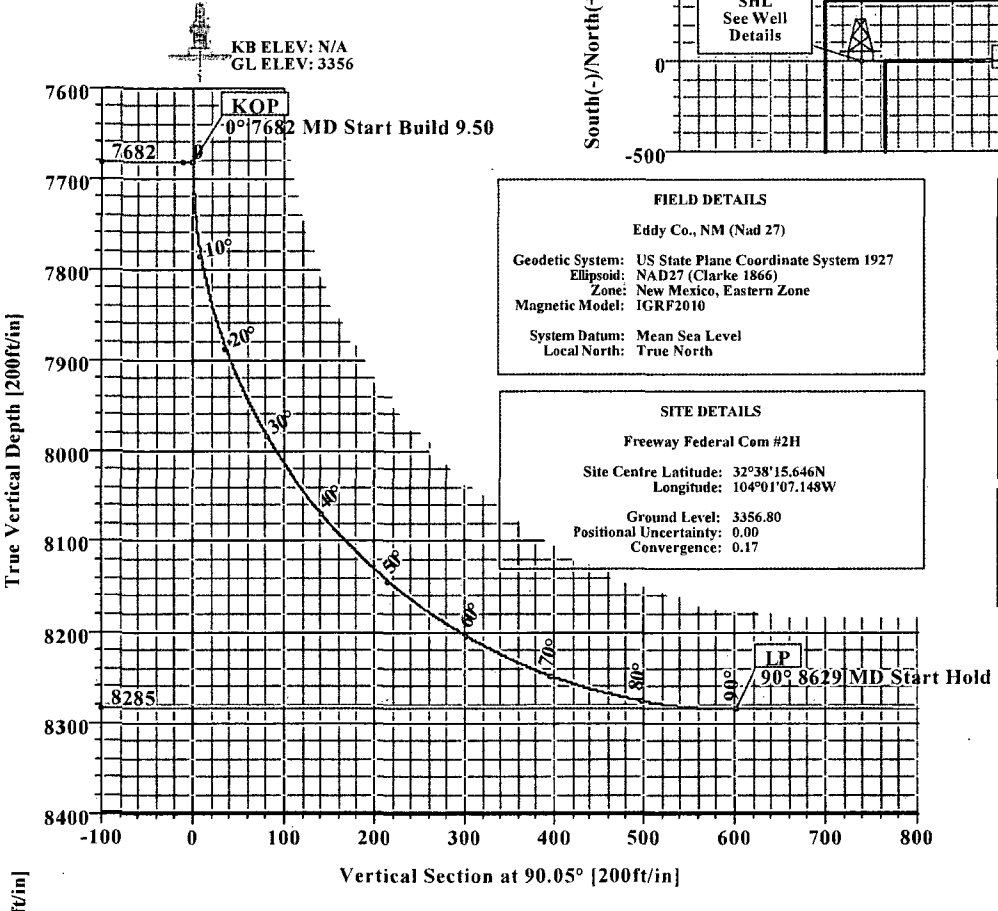
WELL FILE: **PLAN 2**

OCTOBER 30, 2012

Weatherford International, Ltd.
P.O. Box 61028
Midland, TX 79711 USA
+1.432.561.8892 Main
+1.432.561.8895 Fax
www.weatherford.com

Freeway Federal Com #2H
Eddy Co, NM





FIELD DETAILS

Eddy Co., NM (Nad 27)

Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS

Freeway Federal Com #2H

Site Centre Latitude: 32°38'15.646N
Longitude: 104°01'07.148W

Ground Level: 3356.80
Positional Uncertainty: 0.00
Convergence: 0.17

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	90.05	0.00	0.00	0.00	0.00	0.00	0.00	
2	7681.89	0.00	90.05	7681.89	0.00	0.00	0.00	0.00	0.00	
3	8629.25	90.00	90.05	8285.00	-0.56	603.11	9.50	90.05	603.11	
4	12751.30	90.00	90.05	8285.00	-4.41	4725.16	0.00	0.00	4725.16	PBHL

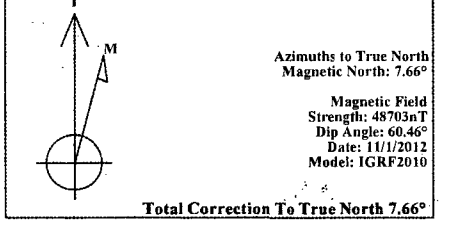
TARGET DETAILS

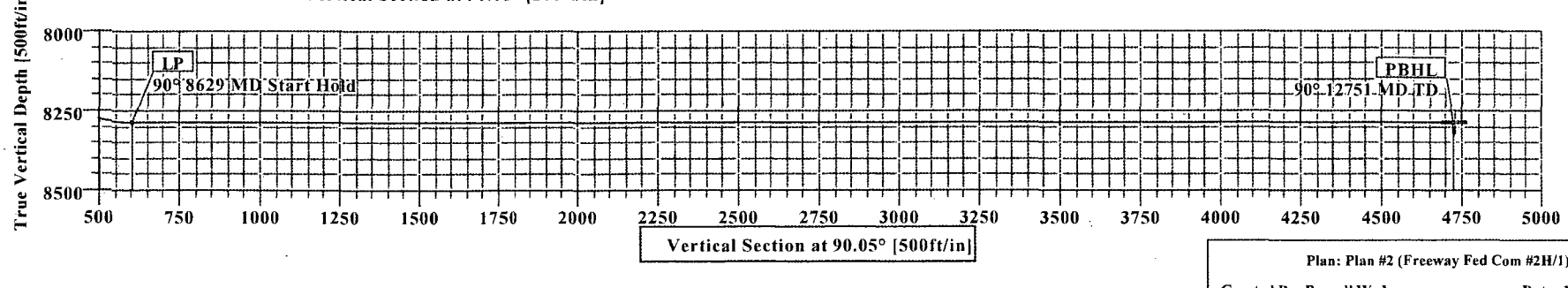
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8285.00	-4.41	4725.16	595852.14	601593.69	Point

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Freeway Fed Com #2H	0.00	0.00	595842.55	596868.54	32°38'15.646N	104°01'07.148W	N/A

Weatherford





Plan: Plan #2 (Freeway Fed Com #2H/1)

Created By: Russell W. Joyner Date: 10/30/2012

Weatherford
WFT Plan Report - X & Y's

Weatherford

Company:	Chi Energy	Date:	10/30/2012	Time:	14:34:30	Page:	1
Field:	Eddy Co., NM (Nad 27)	Co-ordinate(NE) Reference:	Well: Freeway Fed Com #2H, True North				
Site:	Freeway Federal Com #2H	Vertical (TVD) Reference:	SITE 0.0				
Well:	Freeway Fed Com #2H	Section (VS) Reference:	Well (0.00N,0.00E,90.05Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature			Db:	Sybase

Plan:	Plan #2	**Date Composed:**	10/30/2012
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Field:	Eddy Co., NM (Nad 27)				
Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Eastern Zone		
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Well Centre		
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	IGRF2010		

Site:	Freeway Federal Com #2H							
Site Position:		**Northing:**	595842.55 ft	**Latitude:**	32	38	15.646	N
From:	Geographic	**Easting:**	596868.54 ft	**Longitude:**	104	1	7.148	W
Position Uncertainty:	0.00 ft			**North Reference:**			True	
Ground Level:	3356.80 ft			**Grid Convergence:**			0.17	deg

Well:	Freeway Fed Com #2H			**Slot Name:**				
Well Position:	**+N/-S** 0.00 ft	**Northing:**	595842.55 ft	**Latitude:**	32	38	15.646	N
	+E/-W 0.00 ft	**Easting :**	596868.54 ft	**Longitude:**	104	1	7.148	W
Position Uncertainty:	0.00 ft							

Wellpath:	1		**Drilled From:**	Surface	
			Tie-on Depth:	0.00	ft
Current Datum:	SITE	**Height** 0.00 ft	**Above System Datum:**	Mean Sea Level	
Magnetic Data:	11/1/2012		**Declination:**	7.66	deg
Field Strength:	48703 nT		**Mag Dip Angle:**	60.46	deg

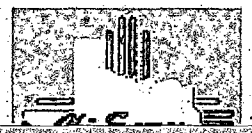
Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	90.05

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	90.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7681.89	0.00	90.05	7681.89	0.00	0.00	0.00	0.00	0.00	0.00	
8629.25	90.00	90.05	8285.00	-0.56	603.11	9.50	9.50	0.00	90.05	
12751.30	90.00	90.05	8285.00	-4.41	4725.16	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
7600.00	0.00	90.05	7600.00	0.00	0.00	0.00	0.00	595842.55	596868.54	
7681.89	0.00	90.05	7681.89	0.00	0.00	0.00	0.00	595842.55	596868.54	KOP
7700.00	1.72	90.05	7700.00	0.00	0.27	0.27	9.50	595842.55	596868.81	
7750.00	6.47	90.05	7749.86	0.00	3.84	3.84	9.50	595842.56	596872.38	
7800.00	11.22	90.05	7799.25	-0.01	11.53	11.53	9.50	595842.58	596880.07	
7850.00	15.97	90.05	7847.83	-0.02	23.28	23.28	9.50	595842.60	596891.82	
7900.00	20.72	90.05	7895.28	-0.04	39.01	39.01	9.50	595842.63	596907.55	
7950.00	25.47	90.05	7941.26	-0.05	58.62	58.62	9.50	595842.67	596927.16	
8000.00	30.22	90.05	7985.45	-0.08	81.97	81.97	9.50	595842.72	596950.51	
8050.00	34.97	90.05	8027.57	-0.10	108.90	108.90	9.50	595842.77	596977.43	
8100.00	39.72	90.05	8067.30	-0.13	139.22	139.22	9.50	595842.84	597007.76	
8150.00	44.47	90.05	8104.39	-0.16	172.73	172.73	9.50	595842.90	597041.26	
8200.00	49.22	90.05	8138.58	-0.20	209.19	209.19	9.50	595842.98	597077.73	
8250.00	53.97	90.05	8169.63	-0.23	248.36	248.36	9.50	595843.06	597116.90	
8300.00	58.72	90.05	8197.34	-0.27	289.97	289.97	9.50	595843.14	597158.51	
8350.00	63.47	90.05	8221.50	-0.31	333.73	333.73	9.50	595843.23	597202.27	
8400.00	68.22	90.05	8241.95	-0.35	379.34	379.34	9.50	595843.32	597247.88	



Weatherford

WFT Plan Report - X & Y's

Weatherford

Company:	Chi Energy	**Date:**	10/30/2012	**Time:**	14:34:30	**Page:**	2
Field:	Eddy Co., NM (Nad 27)	**Co-ordinate(NE) Reference:**	Well: Freeway Fed Com #2H, True North				
Site:	Freeway Federal Com #2H	**Vertical (TVD) Reference:**	SITE 0.0				
Well:	Freeway Fed Com #2H	**Section (VS) Reference:**	Well (0.00N,0.00E,90.05Azi)				
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase		

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
8450.00	72.97	90.05	8258.56	-0.40	426.49	426.49	9.50	595843.42	597295.02	
8500.00	77.72	90.05	8271.20	-0.44	474.85	474.85	9.50	595843.52	597343.38	
8550.00	82.47	90.05	8279.80	-0.49	524.09	524.09	9.50	595843.62	597392.62	
8600.00	87.22	90.05	8284.29	-0.54	573.87	573.87	9.50	595843.72	597442.41	
8629.25	90.00	90.05	8285.00	-0.56	603.11	603.11	9.50	595843.78	597471.65	LP
8700.00	90.00	90.05	8285.00	-0.63	673.86	673.86	0.00	595843.92	597542.40	
8800.00	90.00	90.05	8285.00	-0.72	773.86	773.86	0.00	595844.12	597642.40	
8900.00	90.00	90.05	8285.00	-0.82	873.86	873.86	0.00	595844.33	597742.39	
9000.00	90.00	90.05	8285.00	-0.91	973.86	973.86	0.00	595844.53	597842.39	
9100.00	90.00	90.05	8285.00	-1.00	1073.86	1073.86	0.00	595844.73	597942.39	
9200.00	90.00	90.05	8285.00	-1.10	1173.86	1173.86	0.00	595844.94	598042.39	
9300.00	90.00	90.05	8285.00	-1.19	1273.86	1273.86	0.00	595845.14	598142.39	
9400.00	90.00	90.05	8285.00	-1.28	1373.86	1373.86	0.00	595845.34	598242.39	
9500.00	90.00	90.05	8285.00	-1.38	1473.86	1473.86	0.00	595845.54	598342.39	
9600.00	90.00	90.05	8285.00	-1.47	1573.86	1573.86	0.00	595845.75	598442.39	
9700.00	90.00	90.05	8285.00	-1.56	1673.86	1673.86	0.00	595845.95	598542.39	
9800.00	90.00	90.05	8285.00	-1.66	1773.86	1773.86	0.00	595846.15	598642.39	
9900.00	90.00	90.05	8285.00	-1.75	1873.86	1873.86	0.00	595846.36	598742.39	
10000.00	90.00	90.05	8285.00	-1.84	1973.86	1973.86	0.00	595846.56	598842.39	
10100.00	90.00	90.05	8285.00	-1.94	2073.86	2073.86	0.00	595846.76	598942.39	
10200.00	90.00	90.05	8285.00	-2.03	2173.86	2173.86	0.00	595846.96	599042.39	
10300.00	90.00	90.05	8285.00	-2.12	2273.86	2273.86	0.00	595847.17	599142.39	
10400.00	90.00	90.05	8285.00	-2.22	2373.86	2373.86	0.00	595847.37	599242.39	
10500.00	90.00	90.05	8285.00	-2.31	2473.86	2473.86	0.00	595847.57	599342.39	
10600.00	90.00	90.05	8285.00	-2.40	2573.86	2573.86	0.00	595847.78	599442.39	
10700.00	90.00	90.05	8285.00	-2.50	2673.86	2673.86	0.00	595847.98	599542.39	
10800.00	90.00	90.05	8285.00	-2.59	2773.86	2773.86	0.00	595848.18	599642.39	
10900.00	90.00	90.05	8285.00	-2.68	2873.86	2873.86	0.00	595848.39	599742.39	
11000.00	90.00	90.05	8285.00	-2.78	2973.86	2973.86	0.00	595848.59	599842.39	
11100.00	90.00	90.05	8285.00	-2.87	3073.86	3073.86	0.00	595848.79	599942.39	
11200.00	90.00	90.05	8285.00	-2.96	3173.86	3173.86	0.00	595848.99	600042.39	
11300.00	90.00	90.05	8285.00	-3.06	3273.86	3273.86	0.00	595849.20	600142.39	
11400.00	90.00	90.05	8285.00	-3.15	3373.86	3373.86	0.00	595849.40	600242.39	
11500.00	90.00	90.05	8285.00	-3.24	3473.86	3473.86	0.00	595849.60	600342.39	
11600.00	90.00	90.05	8285.00	-3.33	3573.86	3573.86	0.00	595849.81	600442.39	
11700.00	90.00	90.05	8285.00	-3.43	3673.86	3673.86	0.00	595850.01	600542.39	
11800.00	90.00	90.05	8285.00	-3.52	3773.86	3773.86	0.00	595850.21	600642.39	
11900.00	90.00	90.05	8285.00	-3.61	3873.86	3873.86	0.00	595850.41	600742.39	
12000.00	90.00	90.05	8285.00	-3.71	3973.86	3973.86	0.00	595850.62	600842.39	
12100.00	90.00	90.05	8285.00	-3.80	4073.86	4073.86	0.00	595850.82	600942.39	
12200.00	90.00	90.05	8285.00	-3.89	4173.86	4173.86	0.00	595851.02	601042.39	
12300.00	90.00	90.05	8285.00	-3.99	4273.86	4273.86	0.00	595851.23	601142.39	
12400.00	90.00	90.05	8285.00	-4.08	4373.86	4373.86	0.00	595851.43	601242.39	
12500.00	90.00	90.05	8285.00	-4.17	4473.86	4473.86	0.00	595851.63	601342.39	
12600.00	90.00	90.05	8285.00	-4.27	4573.86	4573.86	0.00	595851.83	601442.39	
12700.00	90.00	90.05	8285.00	-4.36	4673.86	4673.86	0.00	595852.04	601542.39	
12751.30	90.00	90.05	8285.00	-4.41	4725.16	4725.16	0.00	595852.14	601593.69	PBHL

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WFT Plan Report - X & Y's

Weatherford

Company:	Chi Energy	**Date:**	10/30/2012	**Time:**	14:34:30 **Page:** 3
Field:	Eddy Co. NM (Nad 27)	**Co-ordinate(NE) Reference:**	Well: Freeway Fed Com #2H, True North		
Site:	Freeway Federal Com #2H	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Freeway Fed Com #2H	**Section (VS) Reference:**	Well (0.00N,0.00E,90.05Azi)		
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg	Min	Sec	<--- Longitude ---> Deg	Min	Sec
PBHL			8285.00	-4.41	4725.16	595852.14	601593.69	32	38	15.599 N	104	0	11.889 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
7681.89	7681.89	KOP
8629.25	8285.00	LP
12751.30	8285.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Weatherford Drilling Services

GeoDec v5.03

Report Date:	July 25, 2012
Job Number:	
Customer:	Chi Energy
Well Name:	Freeway Federal Com #2H
API Number:	
Rig Name:	
Location:	Eddy Co., NM (Nad 27)
Block:	
Engineer:	Patrick Rudolph

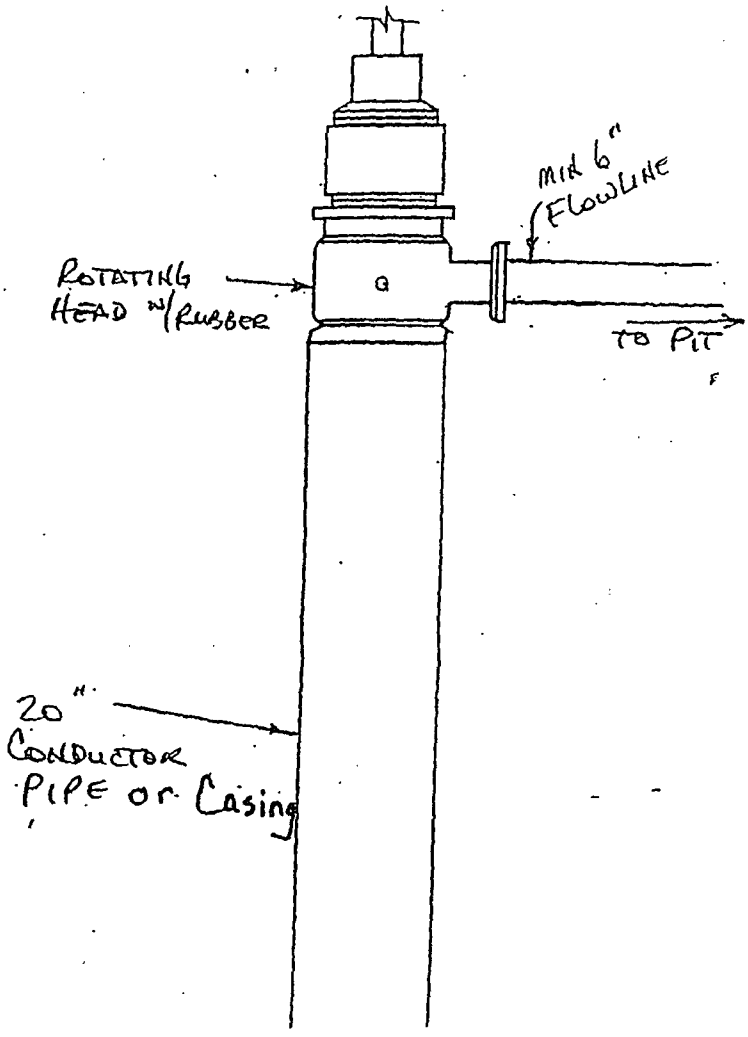
Geodetic Latitude / Longitude	Geodetic Latitude / Longitude
System: Latitude / Longitude	System: Latitude / Longitude
Projection: Geodetic Latitude and Longitude	Projection: Geodetic Latitude and Longitude
Datum: NAD 1927 (NADCON CONUS)	Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866	Ellipsoid: Clarke 1866
Latitude 32.6376796 DEG	Latitude 32.6376796 DEG
Longitude -104.0186523 DEG	Longitude -104.0186523 DEG

Geodetic Location WGS84		Elevation =	0.0 Meters
Latitude =	32.63768° N		32° 38 min 15.647 sec
Longitude =	104.01865° W		104° 1 min 7.148 sec

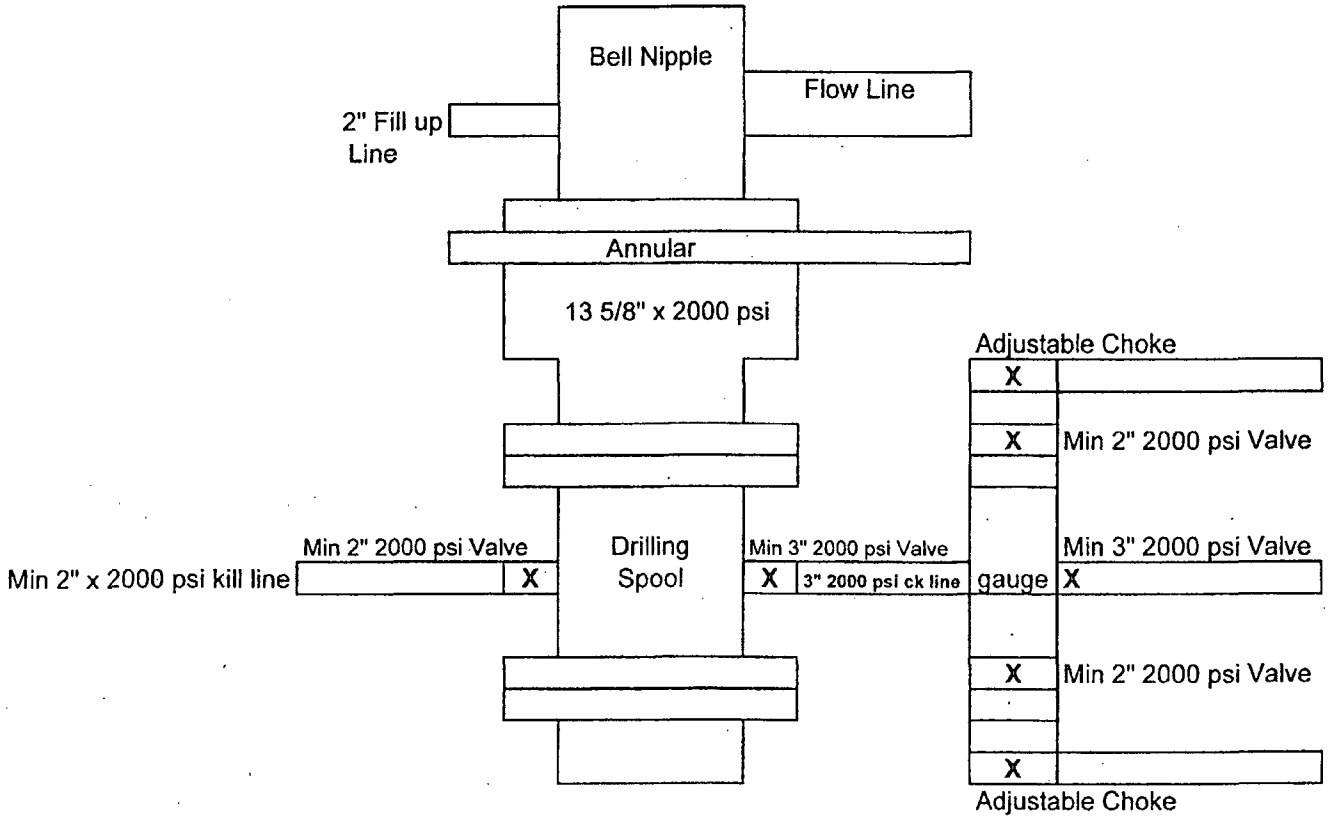
Magnetic Declination =	7.66°	[True North Offset]	
Local Gravity =	.9988 g	CheckSum =	6722
Local Field Strength =	48699 nT	Magnetic Vector X =	23797 nT
Magnetic Dip =	60.46°	Magnetic Vector Y =	3199 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z =	42369 nT
Spud Date =	Nov 01, 2012	Magnetic Vector H =	24011 nT

Signed:_____ Date:_____

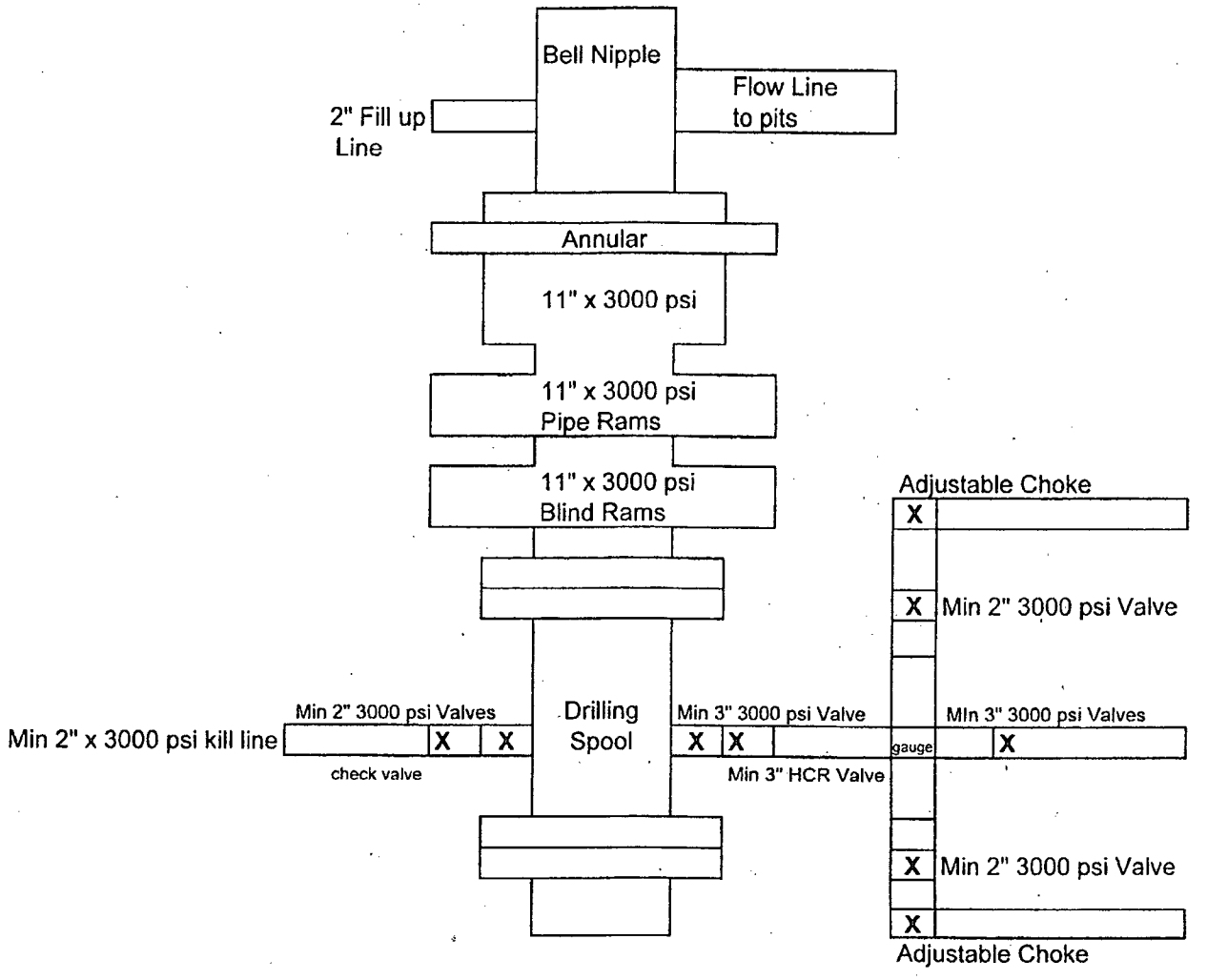
20" DIVERTER SYSTEM

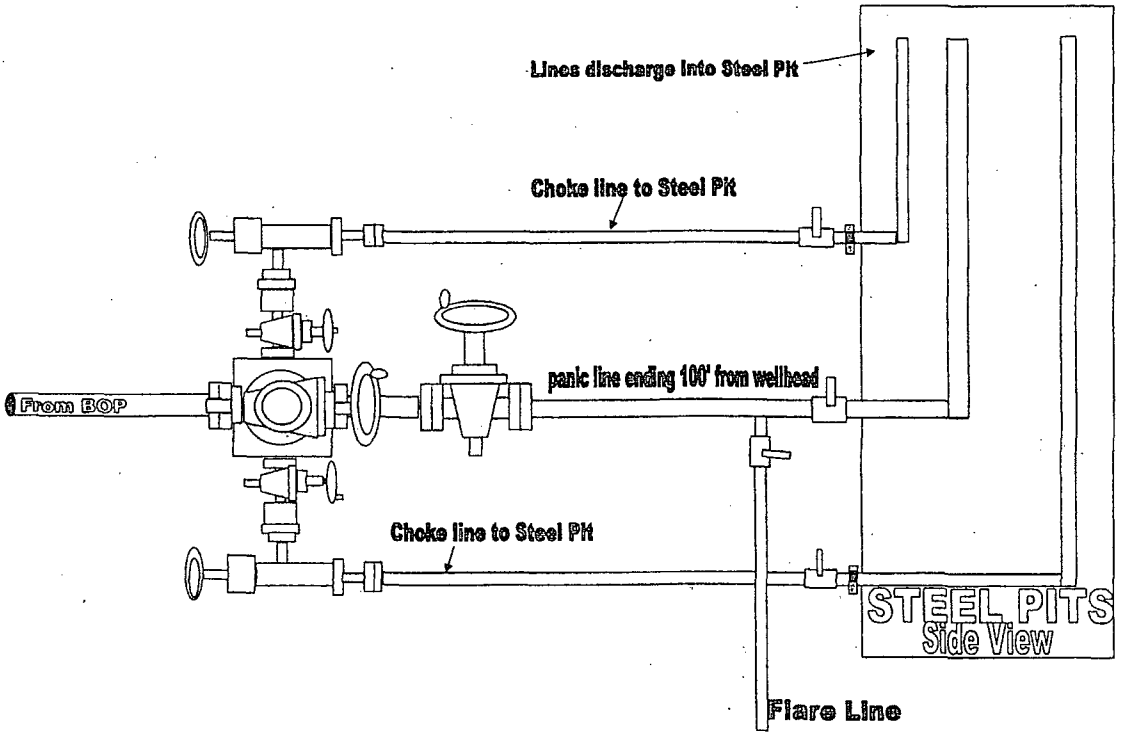


Ex. 2 - 12 1/4" Hole

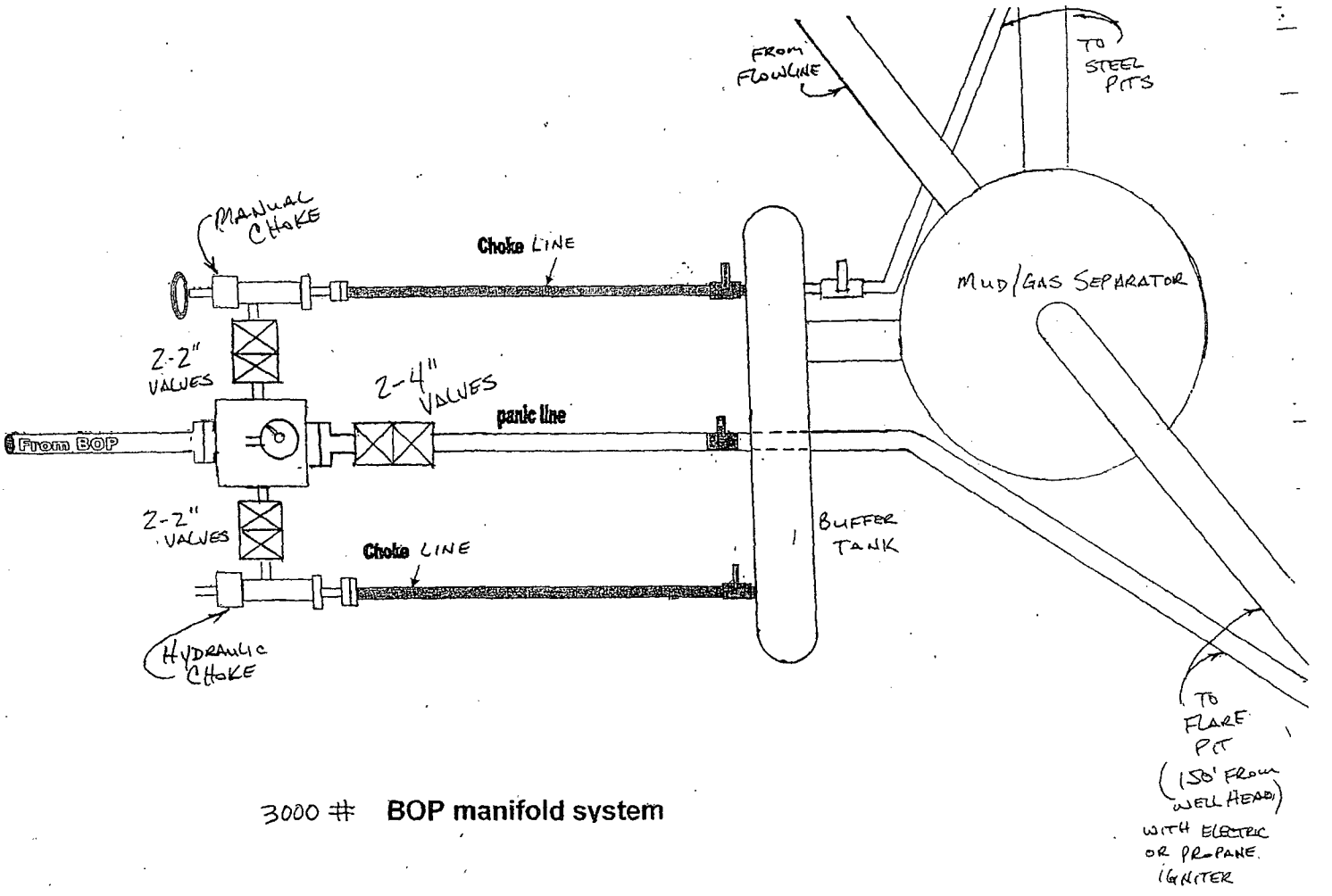


Ex. 2A - 6 1/8" & 8 3/4" Holes





3000# BOP manifold system for Exhibit 2 & 2A



3000 # **BOP manifold system**

Plat for Closed Loop System

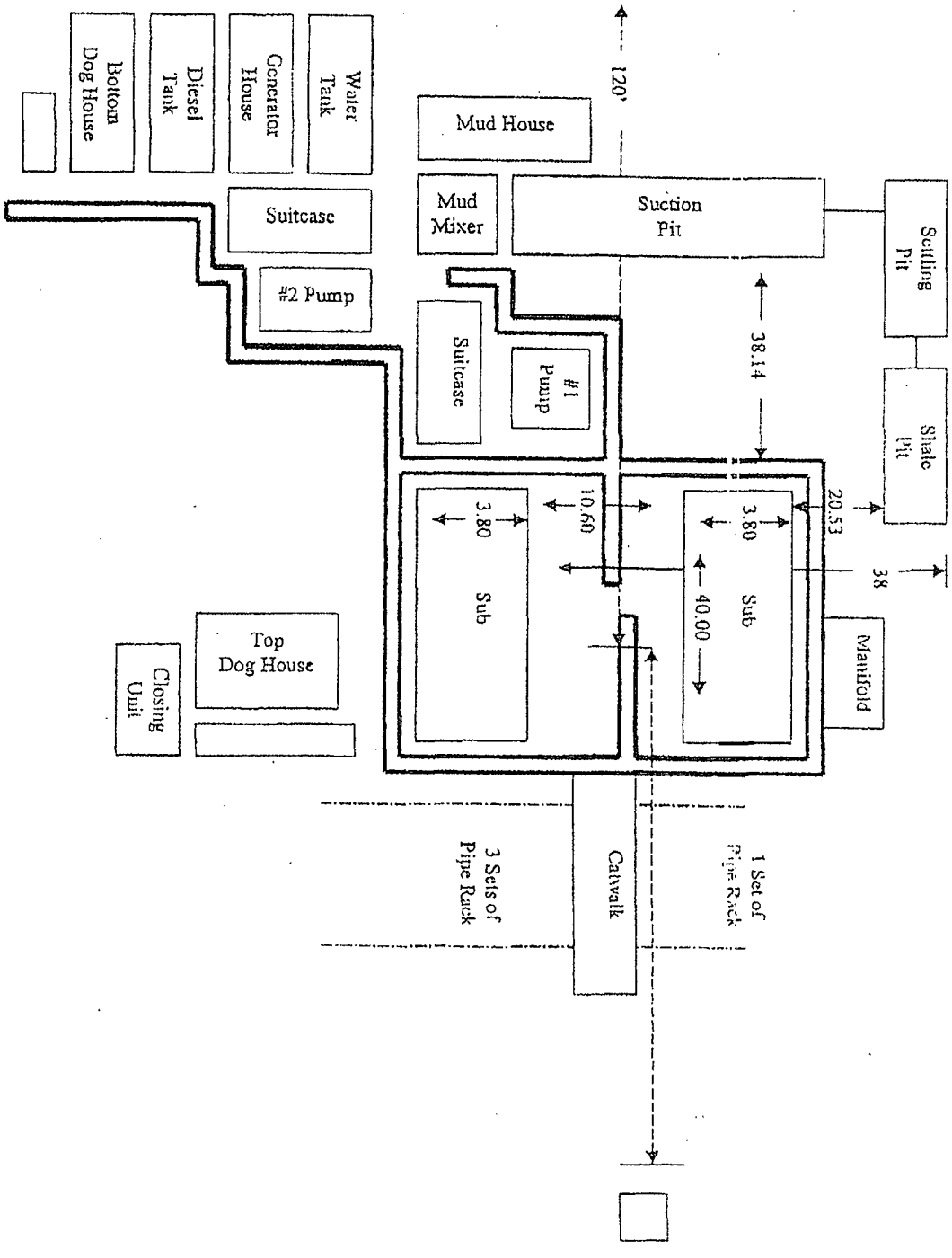
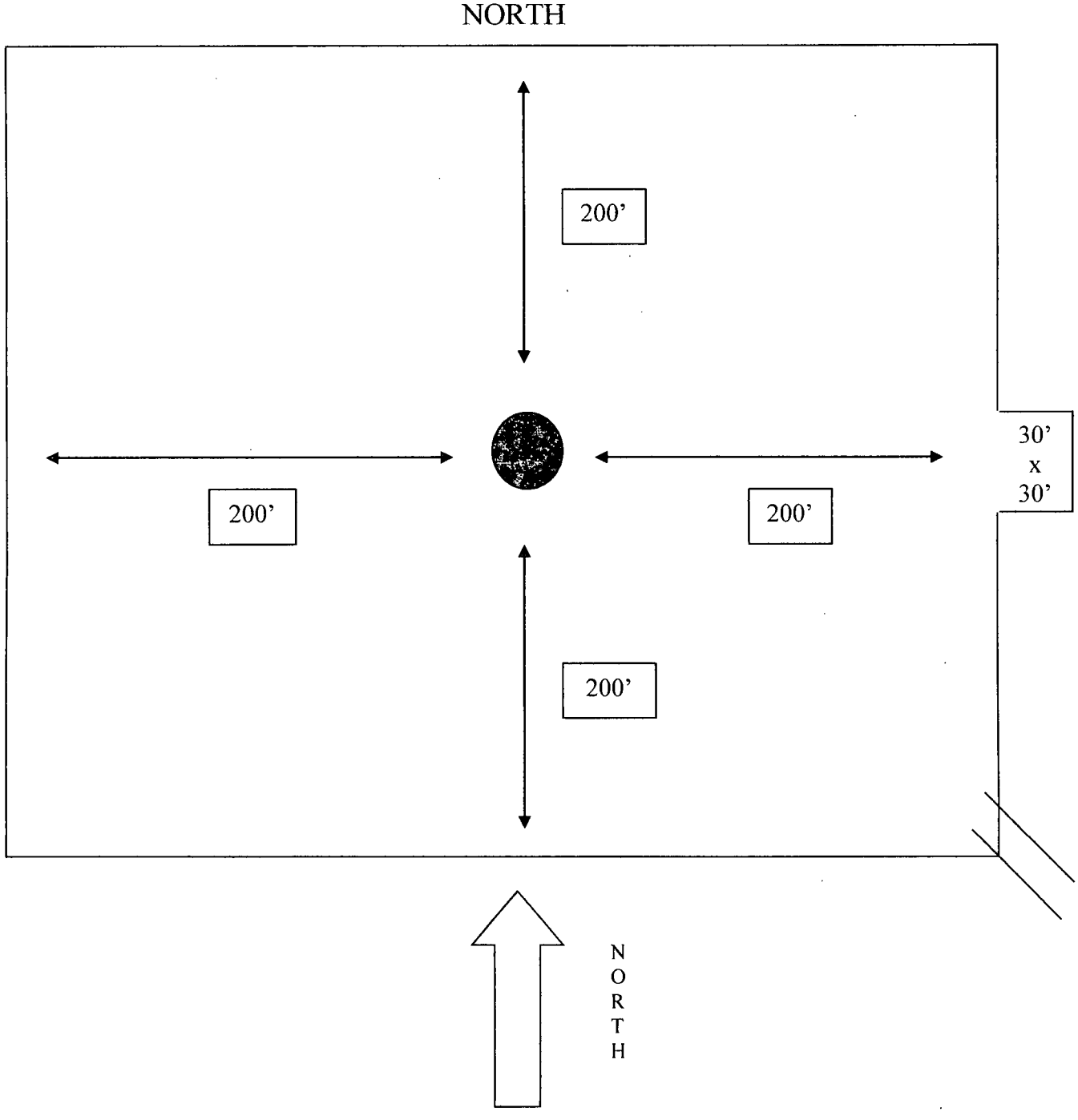


EXHIBIT D

Rig Plat Only
FREEWAY FED COM 2H
V-DOOR EAST



CHI OPERATING, INC.

FREEWAY FED COM #2H
HYDROGEN SULFIDE (H2S) CONTINGENCY DRILLING PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be rigged up and in use when the company drills out from under surface casing. H_2S monitors, warning signs, wind indicators and flags will be in use.

A. All personnel shall receive proper H2S training in accordance with Onshore Order 6 III.C.3.a

B. Briefing Area: Two perpendicular areas will be designated by signs and readily accessible.

C. Required Emergency Equipment:

- Well control equipment
  a. Flare line 150' from wellhead to be ignited by flare gun.
  b. Choke manifold with a remotely operated choke.
  c. Mud/Gas Seperator.

- Protective Equipment for essential personnel.
  Breathing apparatus:
  a. Rescue Packs (SCBA) – 1 unit shall be placed ar each briefing area. 2 units shall be stored in the safety trailer.
  b. Work/Escape packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
  c. Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.

  Auxillary Rescue Equipment:
  a. Stretcher
  b. Two OSHA full body harness
  c. 100 ft. 5/8" OSHA approved rope
  d. One 20# class ABC fire extinguisher

- H2S detection and monitoring Equipment:
  The stationary detector with three sensors will be placed in the upper doghouse, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor, Bell nipple, end of flare line or where well bore fluid is being discharged (Gas sample tubes will be stored in the safety trailer).

- Visual warning systems.
  a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  b. A colored condition flag will be on display, reflecting the current condition, at the drilling site.
  c. Two wind socks will be placed in strategic locations being visible from all angles.

- Mud Program:
  The mud program has been designated to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

- Metallurgy:
  a. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, shall be suitable for H2S service.
  b. All elastomers used for packing and seals shall be H2S trim.

- Communication:
  Communication will be via two way radio in emergency and company vehicles. Cell phones and land lines where available.

Contacting Authorities

CHI Operating personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. CHI Operating, Inc. response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER) and BLM Onshore Order #6.

H_2S Operations

Though no H_2S is anticipated during the drilling operation, this contingency plan will provide for methods to ensure the well is kept under control in the event an H_2S reading of 100 ppm or more are encountered. Once personnel are safe and the proper protective gear is in place and on personnel, the operator and rig crew essential personnel will ensure the well is under control, suspend drilling operations and shut-in the well (unless pressure build up or other operational situations dictate suspending operations will prevent well control), increase the mud weight and circulate all gas from the hole utilizing the mud/gas separator downstream of the choke, the choke manifold and the emergency flare system located 150' from the well. Bring the mud system into compliance and the H_2S level below 10 ppm, then notify all emergency officers that drilling ahead is practical and safe.

Proceed with drilling ahead only after all provisions of Onshore Order 6, Section III.C. have been satisfied.

H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Company Offices - CHI Operating Office 432·634-8958

KEY PERSONNEL					
Name	Title	Location	Phone #		
GARY WOMACK	PRODUCTION ENGINEER	MIDLAND	432-634-8958		
RONNIE ROGERS	FIELD FOREMAN	MIDLAND	432-631-2717		

Agency Call List		
City	Agency or Office	Telephone Number
Artesia	Ambulance	911
Artesia	State Police	575-746-2703
Artesia	Sheriff's Office	575-746-9888
Artesia	City Police	575-746-2703
Artesia	Fire Department	575-746-2701
Artesia	Local Emergency Planning Committee	575-746-2122
Artesia	New Mexico OCD District II	575-748-1283
Carlsbad	Ambulance	911
Carlsbad	State Police	575-885-3137
Carlsbad	Sheriff's Office	575-887-7551
Carlsbad	City Police	575-885-2111
Carlsbad	Fire Department	575-885-2111
Carlsbad	Local Emergency Planning Committee	575-887-3798
Carlsbad	US DOI Bureau of Land Management	575-887-6544
State Wide	New Mexico Emergency Response Commission ("NMERC")	505-476-9600
State Wide	NMERC 24 hour Number	505-827-9126
State Wide	New Mexico State Emergency Operations Center	505-476-9635
National	National Emergency Response Center (Washington, D.C.)	800-424-8802

H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Emergency Services				
Name	**Service**	**Location**	**Telephone Number**	**Alternate Number**
Boots & Coots International Well Control	Well Control	Houston / Odessa	1-800-256-9688	281-931-8884
Cudd Pressure Control	Well Control & Pumping	Odessa	915-699-0139	915-563-3356
Baker Huges Inc.	Pumping Service	Artesia, Hobbs and Odessa	575-746-2757	SAME
Total Safety	Safety Equipment and Personnel	Artesia	575-746-2847	SAME
Cutter Oilfield Services	Drilling Systems Equipment	Midland	432-488-6707	SAME
Assurance Fire & Safety	Safety Equipment and Personnel	Artesia	575-396-9702	575-441-2224
Flight for Life	Emergency Helicopter Evacuation	Lubbock	806-743-9911	SAME
Aerocare	Emergency Helicopter Evacuation	Lubbock	806-747-8923	SAME
Med Flight Air Ambulance	Emergency Helicopter Evacuation	Albuquerque	505-842-4433	SAME
Artesia General Hospital	Emergency Medical Care	Artesia	575-748-3333	702 North 13 Street

H2S Briefing Areas & Alarm Locations

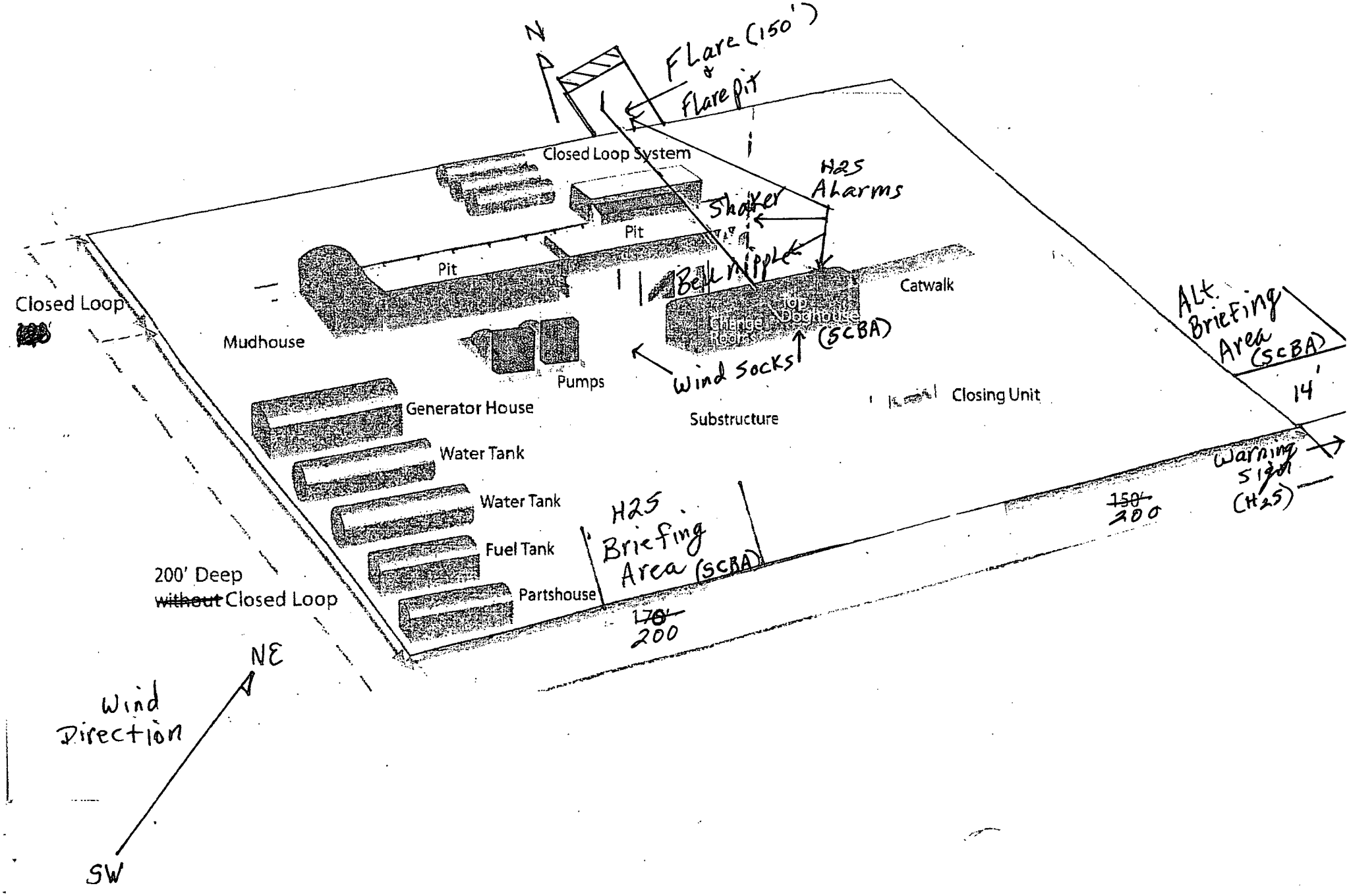
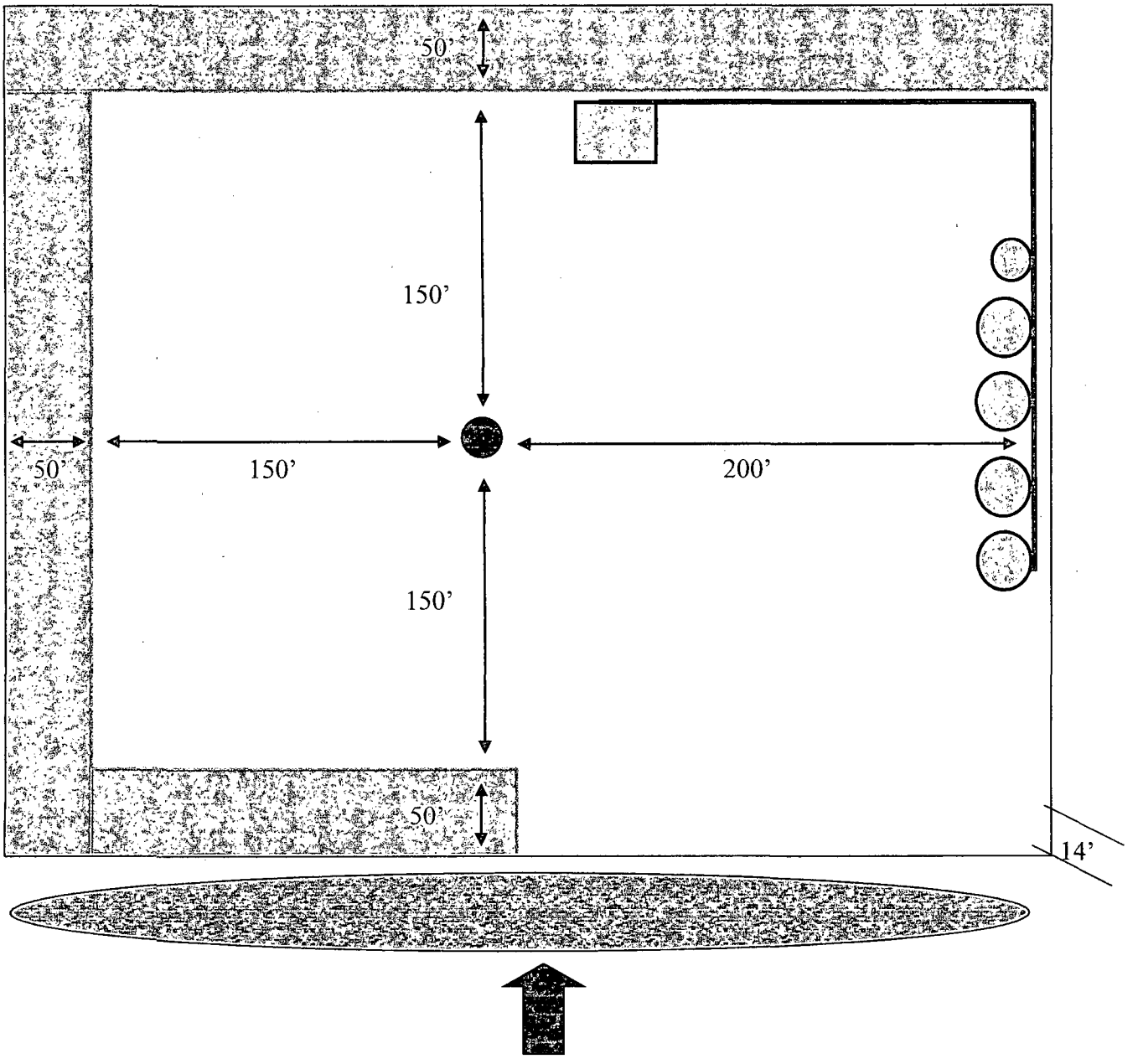


EXHIBIT C

Interim Reclamation & Production Facilities
FREEWAY FED COM 2H
V-DOOR EAST



LEGEND

Well Bore

Topsoil

Interim Reclamation

Berm

Production Facilities

NORTH

SURFACE USE PLAN

CHI OPERATING, INC.
FREEWAY FEDERAL COM 2H
Surface Hole: 330 FNL & 200 FWL, Section 30, T. 19 S., R. 30 E.
Bottom Hole: 330 FNL & 330 FEL, Section 30, T. 19 S., R. 30 E.
Eddy County, New Mexico

This plan is submitted with form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

   A. DIRECTIONS: From the intersection of State Highway 31 and County Road 235 (Curry Comb Road), go northwest on C.R. 235 for 3.6 miles. Turn north on lease road for 0.1 mile then north on old abandoned lease road (to be upgraded) for 0.3 mile. New road will begin at the southwest corner of an old P&A well pad. All existing roads are either paved or a caliche lease road.

   B. See attached plats and maps provided by Madron Surveying, Inc.

   C. The access route from County Road 235 to the well location is depicted on **EXHIBIT A**. The route highlighted in red will be the access, which will not require a ROW due to all of road system being within the same lease.

   D. Existing roads on the access route will be improved and maintained to the standard set forth in Section 2 of this Surface Use Plan of Operations.

2. NEW OR RECONSTRUCTED ACCESS ROADS:

   A. The new road will run from the southeast corner of the well pad and run southeast to the southwest corner of the existing P&A well pad. The distance of the new road will be 181 ft. There will be an existing, abandoned, caliche road (to the P&A well) of 0.3 of a mile to be upgraded south to the existing lease road.

   B. The maximum width of the driving surface will be 14 feet. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1 foot deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.

Level Ground Section

   C. Surface material will be native caliche. The average grade of the entire road will be approximately 3%.
   D. Fence Cuts: No
   E. Cattle guards: No
   F. Turnouts: No
   G. Culverts: No
   H. Cuts and Fills: Not significant

I. Approximately 6 inches of topsoil (root zone) will be stripped from the proposed access road prior to any further construction activity. The topsoil that was stripped will be spread along the edge of the road and within the ditch. The topsoil will be seeded with the proper seed mix designated by the BLM.

J. The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along the access road route.

K. The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

3. LOCATION OF EXISTING WELLS:

See attached map **(Exhibit B)** showing all wells within a one-mile radius.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. In the event the well is found productive the company will place production facilities on the east portion of the well pad **(See Exhibit C for production facility plat).**

B. All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted to BLM specifications.

C. Containment berms will be constructed completely around any production facilities designed to hold fluids. The containment berns will be constructed or compacted subsoil, be sufficiently impervious, hold 1 ½ times the capacity of the largest tank and away from cut or fill areas.

5. LOCATION AND TYPE OF WATER SUPPLY:

The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from commercial water stations in the area and hauled to the location by transport truck using the existing and proposed roads shown in the attached survey plats. If a commercial water well is nearby, a temporary, surface poly line, will be laid along existing roads or other ROW easements and the water pumped to the well. No water well will be drilled on the location.

6. SOURCE OF CONSTRUCTION MATERIALS:

Any construction material that may be required for surfacing of the drill pad and access road will be from a contractor having a permitted source of materials within the general area. No construction materials will be removed from Federal lands without prior approval from the appropriate surface management agency. All roads will be constructed of 6" rolled and compacted caliche.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. The well will be drilled utilizing a closed loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to an NMOCD approved disposal site.

B. Drilling fluids will be contained in steel mud pits.

C. Water produced from the well during completion will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility.

D. Oil produced during operations will be stored in tanks until sold.

E. Portable, self-contained chemical toilets will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to disposal of human and solid waste will be

complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location, not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.

8. ANCILLARY FACILITIES:

No campsite, airstrip, or other facilities will be built as a result of the operation of this well. No staging areas are needed.

9. WELL SITE LAYOUT:

A. **Exhibit D** shows the dimensions of the proposed well pad.
B. The proposed well pad size will be 400' x 400' with a 30' x 30' stinger. **(See Exhibit D).** There will be no reserve pit due to the well being drilled utilizing a closed loop mud system. The closed loop system will meet the NMOCD requirements 19.15.17 .
C. The Madron Surveying, Inc.'s plat, Form C-102 and **Exhibit D**, shows the direction of the pad at a V-Door East.
D. A 600' x 600' area has been staked and flagged.
E. All equipment and vehicles will be confined to the approved disturbed areas of this APD (i.e., access road, well pad, and topsoil storage areas)

10. PLANS FOR SURFACE RECLAMATION:

A. After concluding the drilling and/or completion operations, if the well is found non-commercial, all the equipment will be removed, the surface material, caliche, will be removed from the well pad and road and transported to the original caliche pit or used for other roads. The original stock piled top soil will be returned to the pad and contoured, as close as possible, to the original topography. The access road will have the caliche removed and the road ripped, barricaded and seeded as directed by the BLM.
B. If the well is a producer, the portions of the pad not essential to production facilities or space required for workover operations, will be reclaimed and seeded as per BLM requirements for interim reclamation. **(SEE EXHIBIT C FOR INTERIM RECLAMATION PLAT FOR THIS WELL)**
C. Reclamation Performance Standards
The following reclamation performance standards will be met:

Final Reclamation – Includes disturbed areas where the original landform and a natural vegetative community will be restored and it is anticipated the site will not be redisturbed for future development.

- The original landform will be restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors.
- A self-sustaining, vigorous, diverse, native (or otherwise approved) plant community will be established on the site, with a density sufficient to control erosion and invasion by non-native plants and to re-establish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation.
- Erosion features are equal to or less than surrounding area and erosion control is sufficient so that water naturally infiltrates into the soil and

gullying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.

- The site will be free of State- or county-listed noxious weeds, oil field debris and equipment, and contaminated soil. Invasive and non-native weeds are controlled.

Seeding:

- Seedbed Preparation. Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard. All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil. Prior to seeding, the seedbed will be scarified to a depth of no less than 4 – 6 inches. If the site is to be broadcast seeded, the surface will be left rough enough to trap seed and snow, control erosion, and increase water infiltration.
- If broadcast seeding is to be used and is delayed, final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.
- Seed Application. Seeding will be conducted no more than two weeks following completion of final seedbed preparation. A certified weed-free seed mix designed by the BLM to meet reclamation standards will be used.
- If the site is harrowed or dragged, seed will be covered by no more than 0.25 inch of soil.

11. SURFACE OWNERSHIP:

A. The surface is owned by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.

12. OTHER INFORMATION:

A. The area surrounding the well site is in a gentle sloped, shallow sandy loam, rolling hills type area. The vegetation consists of Mesquite, Catclaw Mimosa, Yucca, with three-awns and some dropseed species.
B. There is no permanent or live water in the immediate area.
C. There are dwellings within 2 miles of this location.
D. A Class III Cultural Resources Examination has been completed and the results will be forwarded to the BLM office.

13. BOND COVERAGE:

Bond Coverage is Nationwide; Bond Number NM-1616.

OPERATORS REPRESENTATIVE:

The CHI Operating, Inc. representatvies responsible for ensuring compliance of the surface use plan are listed below:

Surface:
Barry W. Hunt – Permit Agent
1403 Spring Farm Place
Carlsbad, NM 88220
(575) 885-1417 (Home)
(575) 361-4078 (Cell)

Drilling & Production:
Gary Womack – CHI Operating, Inc.
P.O. Box 1799
Midland, Tx. 79702
(432) 634-8958 (Office)

ON-SITE PERFORMED ON 6/05/12 RESULTED IN PROPOSED LOCATION BEING LEFT WHERE STAKED. IT WAS AGREED TO TURN THE LOCATION TO A V-DOOR EAST. IT WAS FURTHER AGREED TO PLACE THE BATTERY ON THE EAST SIDE OF THE PAD, INTERIM RECLAMATION WOULD BE THE SOUTH, NORTH AND WEST PORTION OF THE PAD. TOP SOIL TO BE TO THE SOUTH.

PRESENT AT ON-SITE:
BARRY HUNT – PERMIT AGENT FOR CHI OPERATING, INC.
JUSTIN FRYE – BLM
MADRON SURVEYING

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Chi Operating, Inc.**
LEASE NO.:	**NMLC-062376**
WELL NAME & NO.:	**Freeway Federal Com 2H**
SURFACE HOLE FOOTAGE:	**0330' FNL & 0200' FWL**
BOTTOM HOLE FOOTAGE	**0330' FNL & 0330' FEL**
LOCATION:	**Section 30, T. 19 S., R 30 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Cave and Karst

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:
In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:
No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:
The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

Tank Battery Liners and Berms:
Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:
A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:
Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:
Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:
Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:
Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Drilling:

Communitization Agreement
A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 4 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

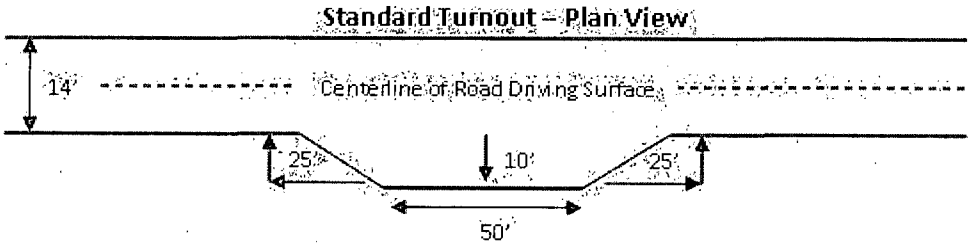
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

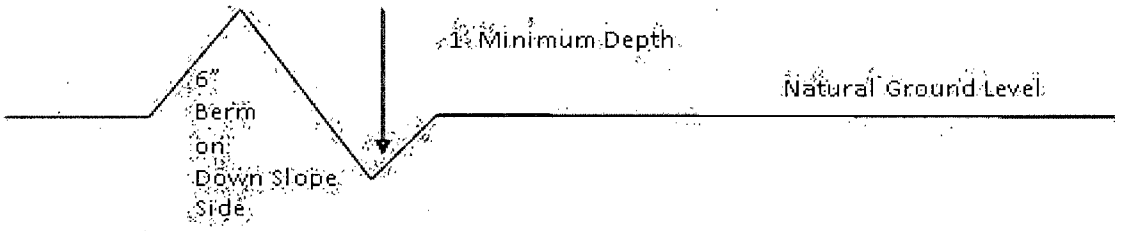
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Culvert Installations
Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

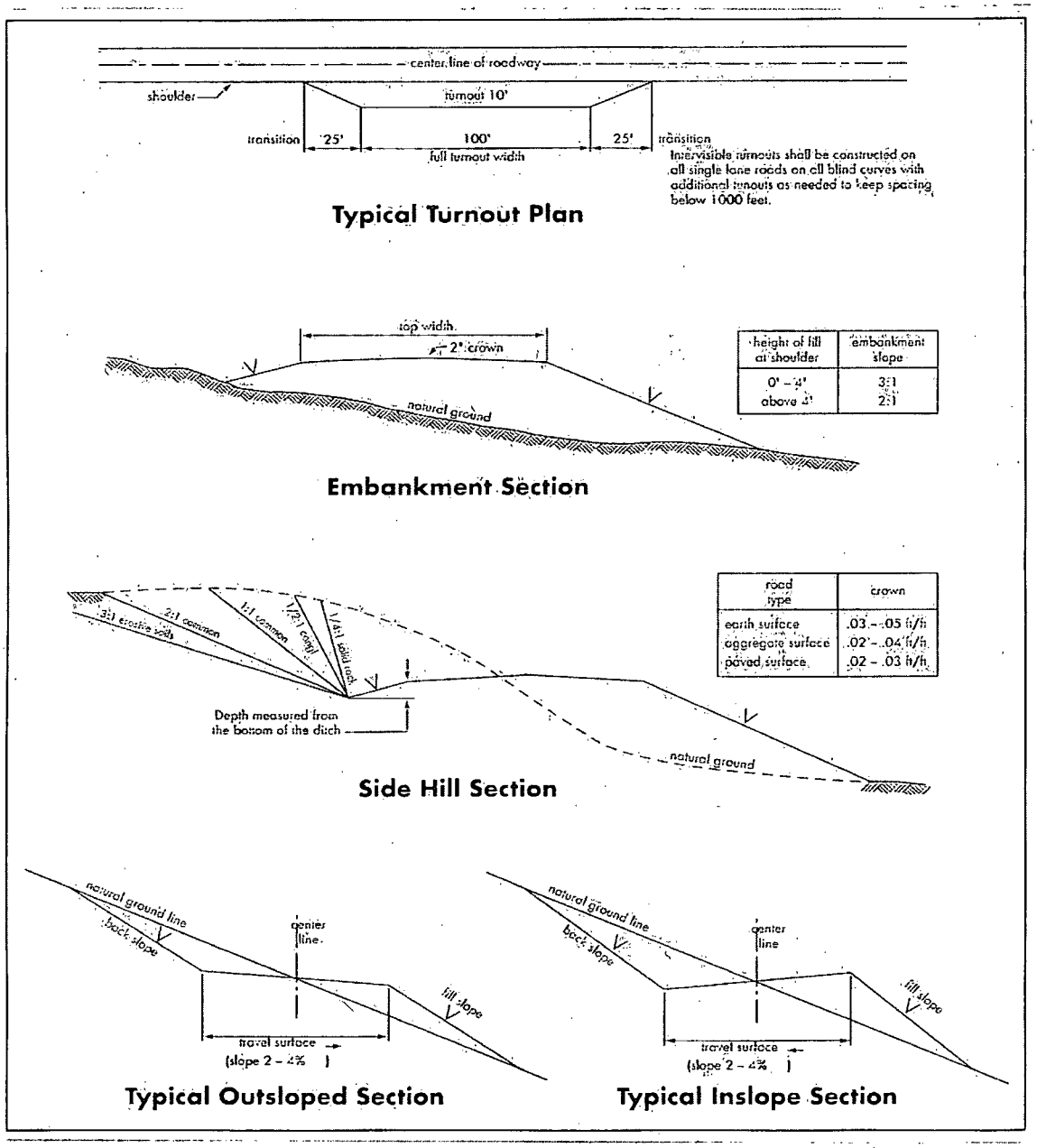
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

High Cave/Karst
Secretary's Potash
Possibility of water and brine flows in the Artesia and Salado Groups.
Possibility of lost circulation in the Artesia Group.

1. The **20** inch surface casing shall be set at approximately **350** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **13-3/8** inch 1st intermediate casing, which shall be set at approximately **1650** feet, is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess calculates to negative 6% - Additional cement Shall be required. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and potash.**

Fresh water mud shall be used while drilling through the Capitan Reef

3. The minimum required fill of cement behind the **9-5/8** inch 2nd intermediate casing, which shall be set at approximately **3650** feet, is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess calculates to 5% - Additional cement Shall be required. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and potash.**

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

4. The minimum required fill of cement behind the **7** inch production casing is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess calculates to 11% - Additional cement Shall be required.**

4-1/2 inch liner must overlap a minimum of 100 feet.

5. The minimum required fill of cement behind the **4-1/2** inch production Liner is:

☒ Cement not required – Packer/Port system to be used.

6. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. **A variance is granted for the use of a diverter on the 20" surface casing.**

    a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13-3/8** intermediate casing shoe shall be **2000 (2M)** psi.

    a. In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).

4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** intermediate casing shoe shall be **3000 (3M)** psi.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

    c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.

    d. The results of the test shall be reported to the appropriate BLM office.

    e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILLING MUD

Fresh water mud shall be used while drilling through the Capitan Reef.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

F. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES (not applied for in APD)

C. ELECTRIC LINES (not applied for in APD)

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed