

OPERATOR'S COPY

TCS
8-7-2014

Form 3160-3
(April 2004)

SECRETARY'S POTASH

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-0560353
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Chi Operating, Inc.		7. If Unit or CA Agreement, Name and No. Benson Delaware Unit NM-126412X
3a. Address P.O. Box 1799 Midland, TX 79702		8. Lease Name and Well No. Benson Delaware Unit No. 24 <38663>
3b. Phone No. (include area code) 432-685-5001		9. API Well No. 30-015-42567 <4378>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1040' FNL & 125' FEL At proposed prod. zone 1650' FNL & 330' FEL		10. Field and Pool, or Exploratory Benson Delaware <97083>
14. Distance in miles and direction from nearest town or post office* 16 road miles south of Loco Hills		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 11-T19S-R30E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 125'	16. No. of acres in lease 2160.32	12. County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 125'	17. Spacing Unit dedicated to this well 10 (40)	13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 57'	19. Proposed Depth TVD 5200 MD 5274.16'	20. BLM/BIA Bond No. on file NM-1616
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3463.5 GL	22. Approximate date work will start* 07/23/2012	23. Estimated duration 3-4 weeks

24. Attachments

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

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

25. Signature <i>George R. Smith</i>	Name (Printed/Typed) George R. Smith	Date 05/16/2012
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Title
POA agent for Chi Operating, Inc.

Approved by (Signature) <i>Jim A. Allen</i>	Name (Printed/Typed) Jim A. Allen	Date 8/24/12
--	---	------------------------

Title
STATE DIRECTOR Office
NM STATE 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.

*(Instructions on page 2)

Cannot Produce until Non Standard
Proration Unit is
Approved. TCS

Capitan Controlled Water Basin

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 06 2014

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

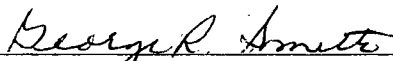
RECEIVED

**Approval Subject to General Requirements
& Special Stipulations Attached**

CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have knowledge of State and Federal laws applicable to this operation; that the statements made in the 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 which it is approved. I also certify that I, or the company I represent, am/is 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 a false statement.

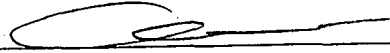
May 18, 2012



George R. Smith
POA Agent for: Chi Operating, Inc.

SIGNATURE AND ACKNOWLEDGEMENT

LRE Operating, LLC

By: 

Name: Charles Adcock

Title: Managing Director – Lime Rock Resources, G.P.

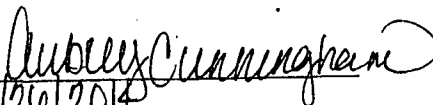
Date: 03/07/2012

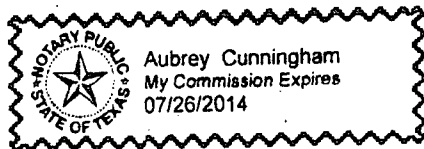
Address: 1111 Bagby Street, Suite 4600, Houston, TX 77002

Telephone Number: (713)292-9512

State of TEXAS
County of HARRIS

This instrument was acknowledged before me on March 7th, 2012 by Charles Adcock,
Managing Director of LRE Operating, LLC acting on behalf of said limited partnership.

Signature of notarial officer: 
My commission expires: 07/26/2014



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

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 October 15, 2009
Submit one copy to appropriate
District Office
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ APL Number 30-015-72567		² Pool Code 97083		³ Pool Name Benson Delaware	
⁴ Property Code 27108 38663		⁵ Property Name BENSON DELAWARE UNIT			⁶ Well Number 24
⁷ OGRID No. 4378		⁸ Operator Name CHI OPERATING, INC.			⁹ Elevation 3463.5

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
A	11	19 S	30 E		1040	NORTH	125	EAST	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
H	11	19 S	30 E		1650	NORTH	330	EAST	EDDY

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. NSP - required
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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.

<p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27), AND ARE IN DECIMAL DEGREE FORMAT.</p>	<p>N Q CORNER SEC. 11 LAT. = 32.6819955°N LONG. = 103.9421560°W</p>	<p>N Q CORNER SEC. 11 LAT. = 32.6819805°N LONG. = 103.9335731°W</p>	<p>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.</p> <p><i>George R. Smith</i> 5/17/12 Signature Date</p> <p>Printed Name George R. Smith, POA agent</p>
	<p>BENSON DELAWARE UNIT #24 ELEV. = 3463.5' LAT. = 32.6791229°N (NAD27) LONG. = 103.9339815°W</p>	<p>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.</p> <p>FEBRUARY 20, 2012 Date of Survey</p> <p><i>Michael F. Jaramillo</i> Signature and Seal of Professional Surveyor</p> <p>Certificate Number: MICHAEL F. JARAMILLO, PLS 12797 SURVEY NO. 876R</p>	

CR 250

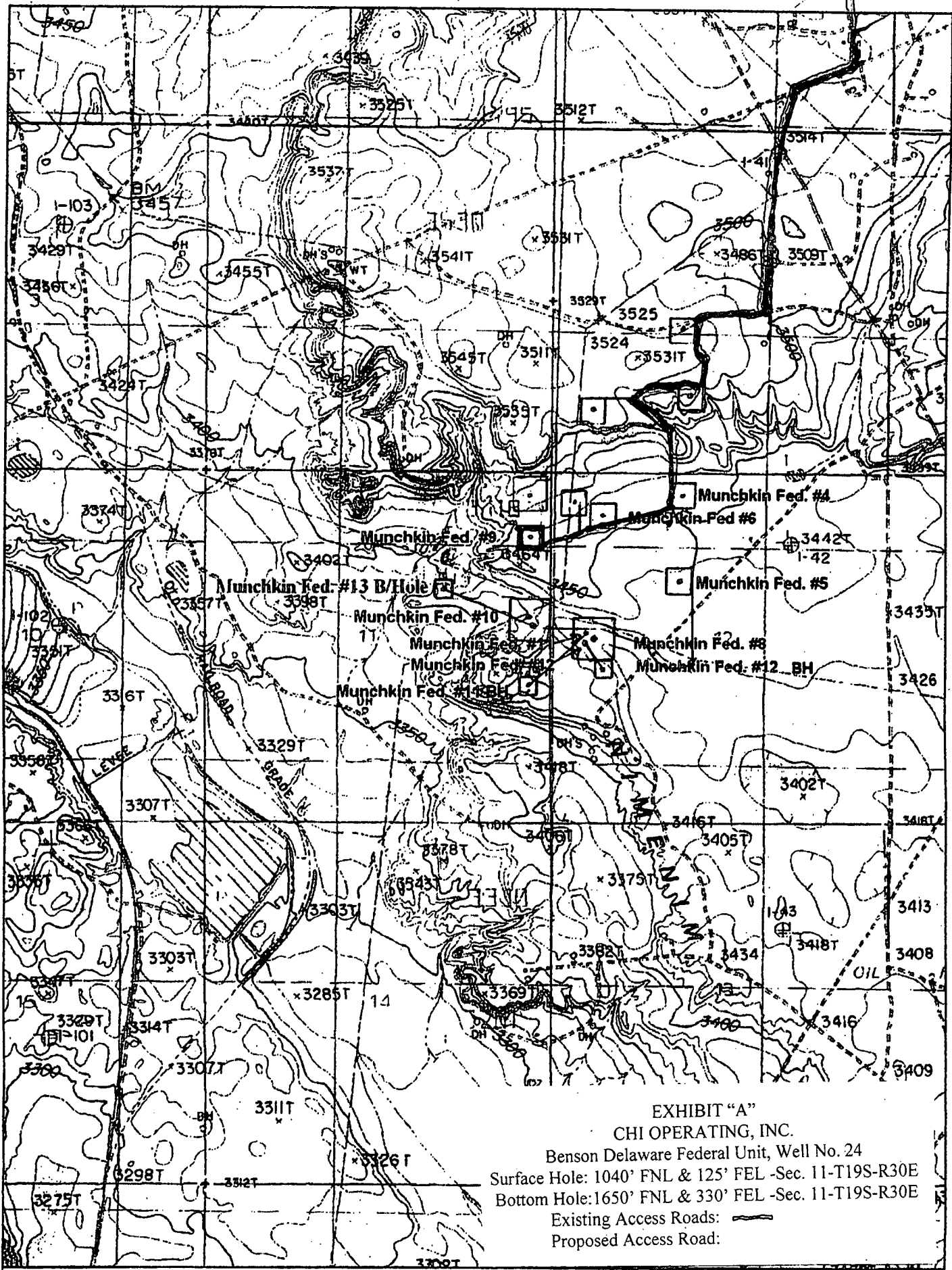
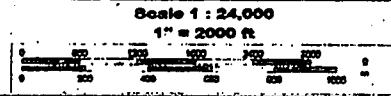


EXHIBIT "A"
 CHI OPERATING, INC.
 Benson Delaware Federal Unit, Well No. 24
 Surface Hole: 1040' FNL & 125' FEL -Sec. 11-T19S-R30E
 Bottom Hole: 1650' FNL & 330' FEL -Sec. 11-T19S-R30E
 Existing Access Roads: ———
 Proposed Access Road: - - - - -



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 www.delorme.com



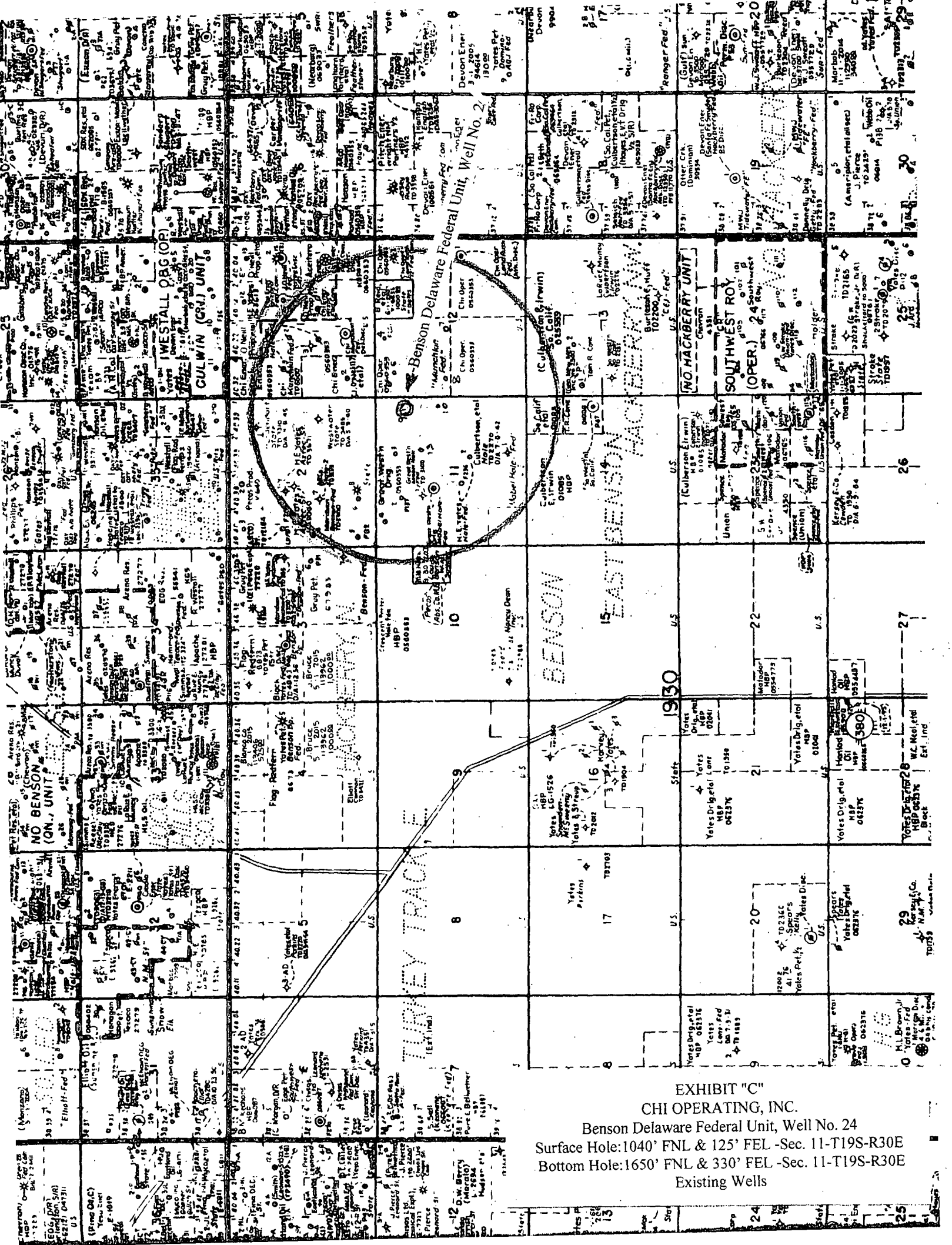
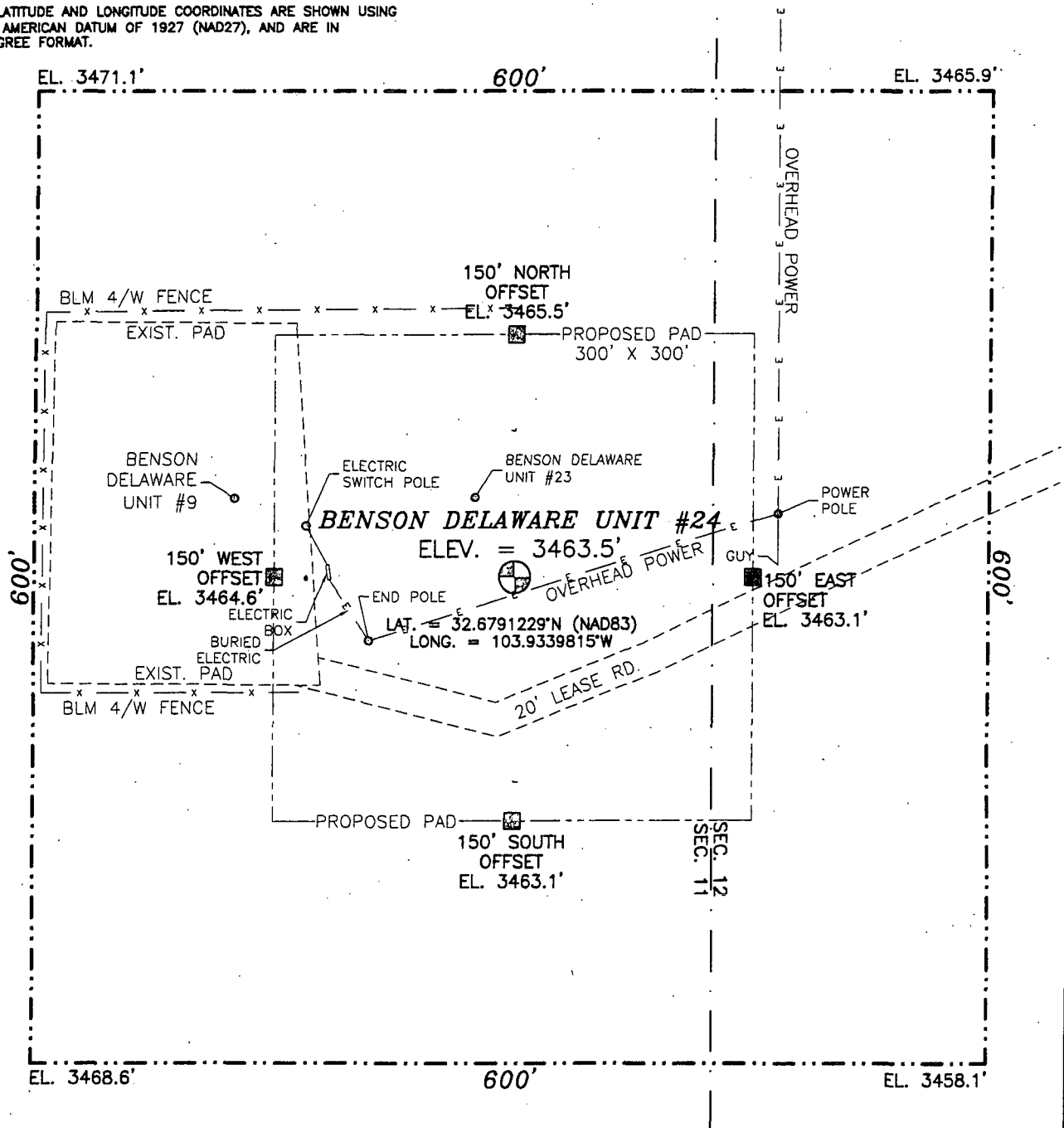


EXHIBIT "C"
 CHI OPERATING, INC.
 Benson Delaware Federal Unit, Well No. 24
 Surface Hole: 1040' FNL & 125' FEL - Sec. 11-T19S-R30E
 Bottom Hole: 1650' FNL & 330' FEL - Sec. 11-T19S-R30E
 Existing Wells

SECTION 11, TOWNSHIP 19 SOUTH, RANGE 30 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

NOTE: THE LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27), AND ARE IN DECIMAL DEGREE FORMAT.



010 50 100 200
 SCALE 1" = 100'

DIRECTIONS TO LOCATION
 FROM THE INTERSECTION OF CO. RD. #222 (SHUGART) AND CO. RD. 250 (GRUBBS) GO W-SW ON 250 FOR APPROX. 2.3 MILES TURN SOUTH-SOUTHEAST ON GOOD CALICHE LEASE ROAD AND GO APPROX. 0.85 OF A MILE THEN WEST APPROX. 0.2 OF A MILE, THEN SOUTH APPROX. 0.65 OF A MILE THEN WEST APPROX. 0.25 OF A MILE, THEN SOUTH APPROX. 0.2 OF A MILE THEN WEST APPROX. 0.2 OF A MILE THEN SE APPROX. 0.2 OF A MILE THEN SOUTH APPROX. 0.2 OF A MILE THEN SW APPROX. 0.3 OF A MILE TO LOCATION APPROX 100' NORTH

CHI OPERATING, INC.
BENSON DELAWARE UNIT #24
 LOCATED 1040 FT. FROM THE NORTH LINE
 AND 125 FT. FROM THE EAST LINE OF
 SECTION 11, TOWNSHIP 19 SOUTH,
 RANGE 30 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

SURVEY NO. 876
 MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
 (575) 234-3341
 FEBRUARY 20, 2012

APPLICATION FOR DRILLING

CHI OPERATING, INC.

Benson Delaware Federal Unit, Well No. 24
 Surface Hole: 1040' FNL & 125' FEL -Sec. 11-T19S-R30E
 Bottom Hole 1650' FNL & 330' FEL -Sec. 11-T19S-R30E (directional drill)
 Eddy County, New Mexico
 Lease No.: NM-0560353
 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Chi Operating, Inc. submits the following items of pertinent information in accordance with BLM requirements:

- The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- The estimated tops of geologic markers are as follows:

Anhydrite	400'	Seven Rivers	2430'
Top of Salt	1300'	Queen	3050'
Base of Salt	1950'	Delaware	4170'
Yates	2240'	T.D	5200'

- The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.
 Oil: Possible in the Delaware
 Gas: Possible in the Delaware

4. Proposed New Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH FACTOR	COLLAPSE DESIGN FACTOR	BURST DESIGN FACTOR	TENSION DESIGN FACTOR
17 1/2"	13 3/8"	48.0#	H-40	ST&C	500' / 160	2.425	8.79	SF > 10
11"	8 5/8"	32.0#	K-55	ST&C	2,050'	1.94	4.61	7.23
7 7/8"	5 1/2"	15.5#	K-55	LT&C	5,200'	1.16	2.23	3.31

5. Cement Program

Excess Cement = 25%

CASING	SETTING DEPTH	QUANTITY OF CEMENT 30% excess on cement	TOC	YIELD
13 3/8"	500'	400 sx "C" + 4% gel + 2% CaCl2 + 25pps CF + 1 pps Gil	Surface	1.34
8 5/8"	2,050'	375 sx "C" Lite/POZ (35:65) + 10% Salt = 1pps Gil & 150 sx "C" 1% CaCl2 = .25 lb/sk Cello Flake	"	1.34
5 1/2"	5,200'	Stage 1: 400 sx Class "C" + 4.0% gel (Bentonite) + 2% CaCl2 + 2 pps Gilsonite .. Mixed @ 13.6 ppg.	"	1.55
		Stage 2: 325 sx :Cl "C" + 2% CaCl2 + ..25lb/sk cello flake. Mixed @ 14.8 ppg..	"	2.10 1.34
		<i>per operator 6/28/12</i>	"	

6. Proposed Control Equipment: A 13 5/8" 2000 psi wp Shaffer double gate hydraulic ram. BOP will be installed on the 13 3/8" casing. Casing and BOP will be tested as per Onshore Oil & Gas Order No. 2. Prior to drilling out the 8 5/8" casing shoe, the BOP will be tested as per Onshore Oil & Gas Order #2. The pipe rams will be operated and checked daily, plus each time drill pipe is out of hole. This will be documented on driller's log. See Exhibit "E".

7. MUD PROGRAM

DEPTH	MUD PROGRAM MUD	MUD WEIGHT	VIS.	W/L CONTROL
0' - 500' <i>410'</i>	Fresh water mud:	8.4 - 8.7 ppg	32-34	No W/L control
500' - 2050'	Brine water	10 ppg	30-32	NC
2050' - 5200'	Brine, Fresh water *	8.4 - 9.5 ppg	30-32	<15cc@TD for logs
*NOTE:	Switch to fresh water mud if loose circulation			

8. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

9. Testing, Logging, and Coring Program:

Drill Stem Tests: As deemed necessary.

Open Hole Logs: T.D. thru Pay:: GR-CAL-CNL-LDT-
 GR-CAL-DLL-Micro
 CMR.

T.D. to Surface: GR-Neutron

See log A

Coring: Rotary Sidewall: None Planned

Mud Logging: 10' samples-2000' to TD (2 sets of samples).

10. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 2,434 psi with a temperature of 112° and surface pressure of 1,290 psi.

11. H2S: None expected. None in the previous drilling of wells in the area, but the Mud Log Unit will be cautioned to use a gas trap to detect H2S along with a monitor and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas. If the H₂S monitor approaches #10, will prepare to shut-in well and also activate the H2S gas contingency program. This well is being drilled in a close proximity to other wells that did not have an H2S problem.

12. Anticipated starting date: August 15, 2012

Anticipated completion of drilling operations: Approximately 5-6 weeks.

APPLICATION FOR DRILLING

CHI OPERATING, INC.

Benson Delaware Federal Unit, Well No. 24
 Surface Hole: 1040' FNL & 125' FEL -Sec. 11-T19S-R30E
 Bottom Hole : 1650' FNL & 330' FEL -Sec. 1-T19S-R30E (directional drill)
 Eddy County, New Mexico
 Lease No.: NM-0560353
 (Development Well)

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Top of Salt	1300'	Queen	3050' ← ??
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Yates	2240'	T.D	5200'

- The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.
 Oil Possible in the Delaware
 Gas: Possible in the Delaware

6/28/52

4. Proposed New Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH FACTOR	COLLAPSE DESIGN FACTOR	BURST DESIGN FACTOR	TENSION DESIGN FACTOR
17 1/2"	13 3/8"	48.0#	H-40	ST&C	500'	2.425	8.79	SF>10
11"	8 5/8"	32.0#	K-55	ST&C	2,050'	1.94	4.61	7.23
7 7/8"	5 1/2"	15.5#	K-55	LT&C	5,2000'	1.16	2.23	3.31

5. Cement Program

Excess Cement = 25%

CASING	SETTING DEPTH	QUANTITY OF CEMENT 30% excess on cement	TOC	YIELD
13 3/8"	500'	400 sx "C"+4%gel + 2%CaCl2 + 25pps CF + 1 pps Gil	Surface	1.34
8 5/8"	2,050'	375 sx "C" Lite/POZ (35:65) + 10% Salt = 1pps Gil & 150 sx "C" 1% CaCl2 = .25 lb/sk Cello Flake	"	1.34
5 1/2"	5,200'	Stage 1: 276 sx "C" +1.2% FL-52 + .3% CD-32 + 3% SMS	"	1.55
		Stage 2: 325 sx (35:65) POZ :Prem Plus "C" + 6% Bentonite + 5% bwow NaCl + 3 lb sk LCM-1 plus 50 sx Prem Plus "C" + bwoc CaCl	"	2.10
			"	

Note: DV tool @ +/- 3700' if necessary and will make an operational adjustment proportionately for the cement..

*operator did not provide single stage
 will be evaluated and approved as 2 stage.*



Weatherford[®]

Drilling Services

Proposal



BENSON DELAWARE UNIT #24

EDDY COUNTY, NEW MEXICO

WELL FILE: PLAN 3

MARCH 2, 2012

Weatherford International, Ltd.

P.O. Box 61028

Midland, TX. 79711 USA

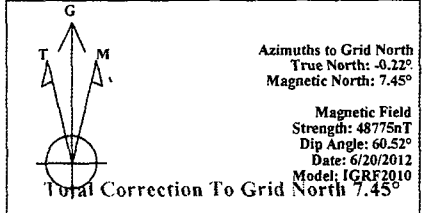
+1.432.561.8892 Main

+1.432.561.8895 Fax

www.weatherford.com



Chi Energy
Benson Delaware Unit #24
Eddy Co., NM



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	198.35	0.00	0.00	0.00	0.00	0.00	0.00	
2	2300.00	0.00	198.35	2300.00	0.00	0.00	0.00	0.00	0.00	
3	2750.87	13.53	198.35	2746.70	-50.28	-16.68	3.00	198.35	52.97	
4	5274.16	13.53	198.35	5200.00	-610.44	-202.50	0.00	0.00	643.15	PBHL

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	5200.00	-610.44	-202.50	610396.73	622673.78	Point

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
BDU #24	0.00	0.00	611007.16	622876.28	32°40'44.842N	103°56'02.333W	N/A

LEGEND	
	BDU #23 (1)
	Plan #3

SITE DETAILS

Benson Delaware Unit #24

Site Centre Latitude: 32°40'44.842N
 Longitude: 103°56'02.333W

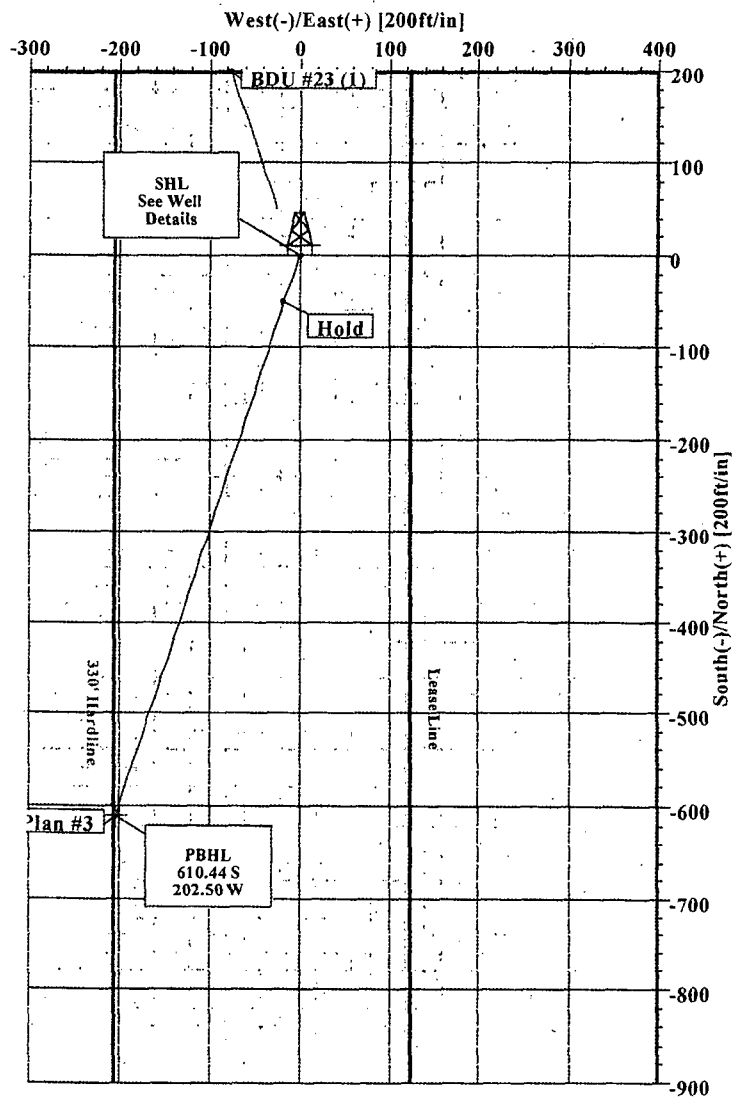
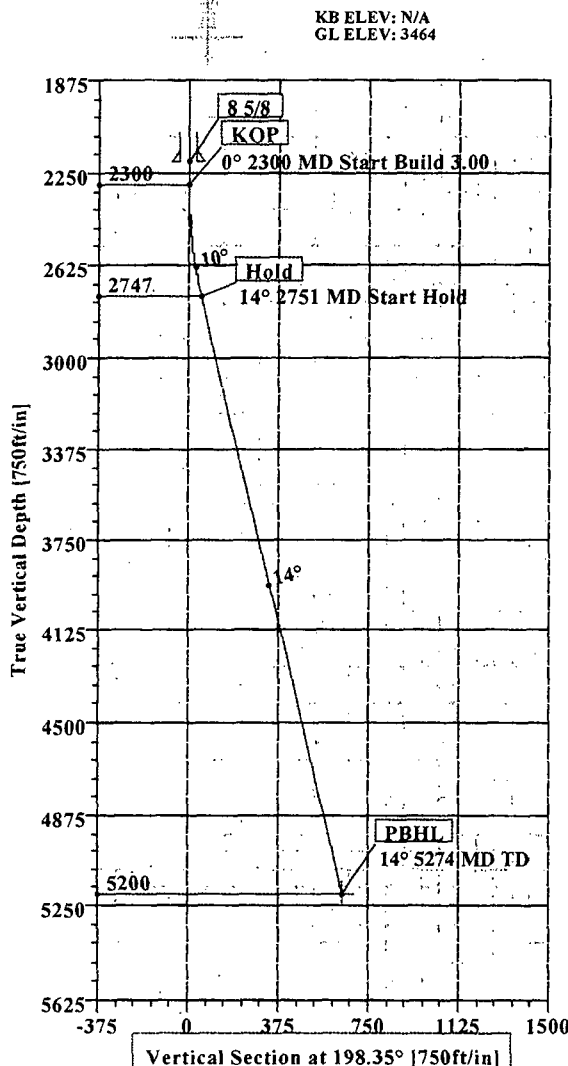
Ground Level: 3464.00
 Positional Uncertainty: 0.00
 Convergence: 0.22

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: Grid North



Weatherford International Ltd.

WFT Plan Report - X & Y's



Company: Chi Energy Field: Eddy Co., NM (Nad 27) Site: Benson Delaware Unit #24 Well: BDU #24 Wellpath: 1	Date: 3/2/2012 Co-ordinate(NE) Reference: Well: BDU #24, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well: (0.00N,0.00E,198.35Azi) Survey Calculation Method: Minimum Curvature	Time: 10:16:37 Page: 1	Db: Sybase
--	--	---	-------------------

Plan: Plan #3 Principal: Yes	Date Composed: 7/14/2011 Version: 1 Tied-to: From Surface
---	--

Field: Eddy Co., NM (Nad 27)

Map System: US State Plane Coordinate System 1927 Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level	Map Zone: New Mexico, Eastern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010
---	--

Site: Benson Delaware Unit #24

Site Position: From: Geographic Position Uncertainty: 0.00 ft Ground Level: 3464.00 ft	Northing: 611007.16 ft Easting: 622876.28 ft	Latitude: 32 40 44.842 N Longitude: 103 56 2.333 W North Reference: Grid Grid Convergence: 0.22 deg
---	---	--

Well: BDU #24 Well Position: +N/S 0.00 ft +E/W 0.00 ft Position Uncertainty: 0.00 ft	Slot Name: Northing: 611007.16 ft Easting: 622876.28 ft Latitude: 32 40 44.842 N Longitude: 103 56 2.333 W
--	---

Wellpath: 1 Current Datum: SITE Magnetic Data: 6/20/2012 Field Strength: 48775 nT Vertical Section: Depth From (TVD) ft	Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 7.66 deg Mag Dip Angle: 60.52 deg	Height: 0.00 ft +N/S: 0.00 ft +E/W: 0.00 ft	Direction: 198.35 deg
--	--	--	------------------------------

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	198.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	198.35	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2750.87	13.53	198.35	2746.70	-50.28	-16.68	3.00	3.00	0.00	198.35	
5274.16	13.53	198.35	5200.00	-610.44	-202.50	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
2300.00	0.00	198.35	2300.00	0.00	0.00	0.00	0.00	611007.16	622876.28	KOP
2400.00	3.00	198.35	2399.95	-2.48	-0.82	2.62	3.00	611004.68	622875.45	
2500.00	6.00	198.35	2499.63	-9.93	-3.29	10.46	3.00	610997.23	622872.98	
2600.00	9.00	198.35	2598.77	-22.32	-7.40	23.51	3.00	610984.85	622868.88	
2700.00	12.00	198.35	2697.08	-39.61	-13.14	41.74	3.00	610967.55	622863.14	
2750.87	13.53	198.35	2746.70	-50.28	-16.68	52.97	3.00	610956.88	622859.60	Hold
2800.00	13.53	198.35	2794.46	-61.19	-20.30	64.46	0.00	610945.98	622855.98	
2900.00	13.53	198.35	2891.69	-83.38	-27.66	87.85	0.00	610923.78	622848.62	
3000.00	13.53	198.35	2988.91	-105.58	-35.02	111.24	0.00	610901.58	622841.25	
3100.00	13.53	198.35	3086.14	-127.78	-42.39	134.63	0.00	610879.38	622833.89	
3200.00	13.53	198.35	3183.37	-149.98	-49.75	158.02	0.00	610857.18	622826.53	
3300.00	13.53	198.35	3280.59	-172.18	-57.12	181.41	0.00	610834.98	622819.16	
3400.00	13.53	198.35	3377.82	-194.38	-64.48	204.80	0.00	610812.78	622811.80	
3500.00	13.53	198.35	3475.05	-216.58	-71.84	228.19	0.00	610790.58	622804.43	
3600.00	13.53	198.35	3572.27	-238.78	-79.21	251.58	0.00	610768.38	622797.07	
3700.00	13.53	198.35	3669.50	-260.98	-86.57	274.97	0.00	610746.18	622789.71	
3800.00	13.53	198.35	3766.72	-283.18	-93.94	298.35	0.00	610723.98	622782.34	

Weatherford International Ltd.

WFT Plan Report - X & Y's



Company: Chi Energy Field: Eddy Co., NM (Nad 27) Site: Benson Delaware Unit #24 Well: BDU #24 Wellpath: 1	Date: 3/2/2012 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:	Time: 10:16:37 Well: BDU #24 Grd North SITE: 0:0 Well (0:00N,0:00E,198.35Azi) Minimum Curvature	Page: 2 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
3900.00	13.53	198.35	3863.95	-305.38	-101.30	321.74	0.00	610701.78	622774.98	
4000.00	13.53	198.35	3961.18	-327.58	-108.67	345.13	0.00	610679.58	622767.61	
4100.00	13.53	198.35	4058.40	-349.78	-116.03	368.52	0.00	610657.39	622760.25	
4200.00	13.53	198.35	4155.63	-371.98	-123.39	391.91	0.00	610635.19	622752.89	
4300.00	13.53	198.35	4252.86	-394.18	-130.76	415.30	0.00	610612.99	622745.52	
4400.00	13.53	198.35	4350.08	-416.38	-138.12	438.69	0.00	610590.79	622738.16	
4500.00	13.53	198.35	4447.31	-438.58	-145.49	462.08	0.00	610568.59	622730.79	
4600.00	13.53	198.35	4544.53	-460.78	-152.85	485.47	0.00	610546.39	622723.43	
4700.00	13.53	198.35	4641.76	-482.98	-160.21	508.86	0.00	610524.19	622716.07	
4800.00	13.53	198.35	4738.99	-505.18	-167.58	532.24	0.00	610501.99	622708.70	
4900.00	13.53	198.35	4836.21	-527.37	-174.94	555.63	0.00	610479.79	622701.34	
5000.00	13.53	198.35	4933.44	-549.57	-182.31	579.02	0.00	610457.59	622693.97	
5100.00	13.53	198.35	5030.67	-571.77	-189.67	602.41	0.00	610435.39	622686.61	
5200.00	13.53	198.35	5127.89	-593.97	-197.03	625.80	0.00	610413.19	622679.25	
5274.16	13.53	198.35	5200.00	-610.44	-202.50	643.15	0.00	610396.73	622673.78	PBHL

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	-Plan hit target	5200.00	-610.44	-202.50	610396.73	622673.78	32 40 38.809 N	103 56 4.729 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
2200.00	2200.00	0.000	0.000	8 5/8

Annotation

MD ft	TVD ft	
2300.00	2300.00	KOP
2750.87	2746.69	Hold
5274.16	5200.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Weatherford International Ltd.

Anticollision Report



Weatherford

Company:	Chi Energy	Date:	3/2/2012	Time:	10:59:53	Page:	1
Field:	Eddy Co., NM (Nad 27)	Co-ordinate(NE) Reference:	Well: BDU #24, Grid North				
Reference Site:	Benson Delaware Unit #24	Vertical (TVD) Reference:	SITE 0.0				
Reference Well:	BDU #24						
Reference Wellpath:	1		Db: Sybase				

NO GLOBAL SCAN: Using user defined selection & scan criteria				Reference:	Plan: Plan #3
Interpolation Method:	MD	Interval:	30.00 ft	Error Model:	ISWWSA Ellipse
Depth Range:	0.00 to	5274.16 ft		Scan Method:	Closest Approach 3D
Maximum Radius:	10000.00 ft			Error Surface:	Ellipse

Plan:	Plan #3	Date Composed:	7/14/2011
Principal:	Yes	Version:	1
		Tied-to:	From Surface

Summary

Site	Offset Wellpath Well	Wellpath	Reference MD ft	Offset MD ft	Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
Benson Delaware Unit	BDU #23	1 V0 Plan: Plan #3 V1	2340.00	2338.86	56.60	46.31	5.50	

Site: Benson Delaware Unit #23
Well: BDU #23
Wellpath: 1 V0 Plan: Plan #3 V1

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
		MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft				
0.00	0.00	0.00	0.00	0.00	0.00	333.27	49.93	-25.15	55.90		No Data	
30.00	30.00	30.00	30.00	0.03	0.03	333.27	49.93	-25.15	55.90	55.84	825.63	
60.00	60.00	60.00	60.00	0.07	0.07	333.27	49.93	-25.15	55.90	55.77	414.04	
90.00	90.00	90.00	90.00	0.10	0.10	333.27	49.93	-25.15	55.90	55.70	276.30	
120.00	120.00	120.00	120.00	0.16	0.16	333.27	49.93	-25.15	55.90	55.59	177.65	
150.00	150.00	150.00	150.00	0.22	0.22	333.27	49.93	-25.15	55.90	55.45	124.36	
180.00	180.00	180.00	180.00	0.29	0.29	333.27	49.93	-25.15	55.90	55.32	95.66	
210.00	210.00	210.00	210.00	0.36	0.36	333.27	49.93	-25.15	55.90	55.18	77.72	
240.00	240.00	240.00	240.00	0.43	0.43	333.27	49.93	-25.15	55.90	55.05	65.45	
270.00	270.00	270.00	270.00	0.49	0.49	333.27	49.93	-25.15	55.90	54.91	56.53	
300.00	300.00	300.00	300.00	0.56	0.56	333.27	49.93	-25.15	55.90	54.78	49.74	
330.00	330.00	330.00	330.00	0.63	0.63	333.27	49.93	-25.15	55.90	54.64	44.41	
360.00	360.00	360.00	360.00	0.70	0.70	333.27	49.93	-25.15	55.90	54.51	40.12	
390.00	390.00	390.00	390.00	0.76	0.76	333.27	49.93	-25.15	55.90	54.37	36.58	
420.00	420.00	420.00	420.00	0.83	0.83	333.27	49.93	-25.15	55.90	54.24	33.61	
450.00	450.00	450.00	450.00	0.90	0.90	333.27	49.93	-25.15	55.90	54.10	31.09	
480.00	480.00	480.00	480.00	0.97	0.97	333.27	49.93	-25.15	55.90	53.97	28.92	
510.00	510.00	510.00	510.00	1.03	1.03	333.27	49.93	-25.15	55.90	53.84	27.03	
540.00	540.00	540.00	540.00	1.10	1.10	333.27	49.93	-25.15	55.90	53.70	25.38	
570.00	570.00	570.00	570.00	1.17	1.17	333.27	49.93	-25.15	55.90	53.57	23.92	
600.00	600.00	600.00	600.00	1.24	1.24	333.27	49.93	-25.15	55.90	53.43	22.61	
630.00	630.00	630.00	630.00	1.30	1.30	333.27	49.93	-25.15	55.90	53.30	21.44	
660.00	660.00	660.00	660.00	1.37	1.37	333.27	49.93	-25.15	55.90	53.16	20.39	
690.00	690.00	690.00	690.00	1.44	1.44	333.27	49.93	-25.15	55.90	53.03	19.43	
720.00	720.00	720.00	720.00	1.51	1.51	333.27	49.93	-25.15	55.90	52.89	18.56	
750.00	750.00	750.00	750.00	1.57	1.57	333.27	49.93	-25.15	55.90	52.76	17.77	
780.00	780.00	780.00	780.00	1.64	1.64	333.27	49.93	-25.15	55.90	52.62	17.04	
810.00	810.00	810.00	810.00	1.71	1.71	333.27	49.93	-25.15	55.90	52.49	16.36	
840.00	840.00	840.00	840.00	1.78	1.78	333.27	49.93	-25.15	55.90	52.35	15.74	
870.00	870.00	870.00	870.00	1.84	1.84	333.27	49.93	-25.15	55.90	52.22	15.17	
900.00	900.00	900.00	900.00	1.91	1.91	333.27	49.93	-25.15	55.90	52.08	14.63	
930.00	930.00	930.00	930.00	1.98	1.98	333.27	49.93	-25.15	55.90	51.95	14.13	
960.00	960.00	960.00	960.00	2.05	2.05	333.27	49.93	-25.15	55.90	51.81	13.67	
990.00	990.00	990.00	990.00	2.11	2.11	333.27	49.93	-25.15	55.90	51.68	13.23	
1020.00	1020.00	1020.00	1020.00	2.18	2.18	333.27	49.93	-25.15	55.90	51.54	12.82	
1050.00	1050.00	1050.00	1050.00	2.25	2.25	333.27	49.93	-25.15	55.90	51.41	12.44	



Weatherford International Ltd.

Anticollision Report



Company: Chi Energy	Date: 3/2/2012	Time: 10:59:53	Page: 2
Field: Eddy Co., NM (Nad 27)			
Reference Site: Benson Delaware Unit #24	Co-ordinate(NE) Reference:	Well: BDU #24, Grid North	
Reference Well: BDU #24	Vertical (TVD) Reference:	SITE 0.0	
Reference Wellpath: 1	Db: Sybase		

Site: Benson Delaware Unit #23
Well: BDU #23
Wellpath: 1 V0 Plan: Plan #3 V1

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr	Edge	Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
1080.00	1080.00	1080.00	1080.00	2.32	2.32	333.27	49.93	-25.15	55.90	51.27	12.07	
1110.00	1110.00	1110.00	1110.00	2.38	2.38	333.27	49.93	-25.15	55.90	51.14	11.73	
1140.00	1140.00	1140.00	1140.00	2.45	2.45	333.27	49.93	-25.15	55.90	51.00	11.41	
1170.00	1170.00	1170.00	1170.00	2.52	2.52	333.27	49.93	-25.15	55.90	50.87	11.10	
1200.00	1200.00	1200.00	1200.00	2.58	2.58	333.27	49.93	-25.15	55.90	50.73	10.81	
1230.00	1230.00	1230.00	1230.00	2.65	2.65	333.27	49.93	-25.15	55.90	50.60	10.54	
1260.00	1260.00	1260.00	1260.00	2.72	2.72	333.27	49.93	-25.15	55.90	50.46	10.28	
1290.00	1290.00	1290.00	1290.00	2.79	2.79	333.27	49.93	-25.15	55.90	50.33	10.03	
1320.00	1320.00	1320.00	1320.00	2.85	2.85	333.27	49.93	-25.15	55.90	50.19	9.79	
1350.00	1350.00	1350.00	1350.00	2.92	2.92	333.27	49.93	-25.15	55.90	50.06	9.57	
1380.00	1380.00	1380.00	1380.00	2.99	2.99	333.27	49.93	-25.15	55.90	49.92	9.35	
1410.00	1410.00	1410.00	1410.00	3.06	3.06	333.27	49.93	-25.15	55.90	49.79	9.14	
1440.00	1440.00	1440.00	1440.00	3.12	3.12	333.27	49.93	-25.15	55.90	49.65	8.95	
1470.00	1470.00	1470.00	1470.00	3.19	3.19	333.27	49.93	-25.15	55.90	49.52	8.76	
1500.00	1500.00	1500.00	1500.00	3.26	3.26	333.27	49.93	-25.15	55.90	49.38	8.58	
1530.00	1530.00	1530.00	1530.00	3.33	3.33	333.27	49.93	-25.15	55.90	49.25	8.40	
1560.00	1560.00	1560.00	1560.00	3.39	3.39	333.27	49.93	-25.15	55.90	49.12	8.24	
1590.00	1590.00	1590.00	1590.00	3.46	3.46	333.27	49.93	-25.15	55.90	48.98	8.08	
1620.00	1620.00	1620.00	1620.00	3.53	3.53	333.27	49.93	-25.15	55.90	48.85	7.92	
1650.00	1650.00	1650.00	1650.00	3.60	3.60	333.27	49.93	-25.15	55.90	48.71	7.77	
1680.00	1680.00	1680.00	1680.00	3.66	3.66	333.27	49.93	-25.15	55.90	48.58	7.63	
1710.00	1710.00	1710.00	1710.00	3.73	3.73	333.27	49.93	-25.15	55.90	48.44	7.49	
1740.00	1740.00	1740.00	1740.00	3.80	3.80	333.27	49.93	-25.15	55.90	48.31	7.36	
1770.00	1770.00	1770.00	1770.00	3.87	3.87	333.27	49.93	-25.15	55.90	48.17	7.23	
1800.00	1800.00	1800.00	1800.00	3.93	3.93	333.27	49.93	-25.15	55.90	48.04	7.11	
1830.00	1830.00	1830.00	1830.00	4.00	4.00	333.27	49.93	-25.15	55.90	47.90	6.99	
1860.00	1860.00	1860.00	1860.00	4.07	4.07	333.27	49.93	-25.15	55.90	47.77	6.87	
1890.00	1890.00	1890.00	1890.00	4.14	4.14	333.27	49.93	-25.15	55.90	47.63	6.76	
1920.00	1920.00	1920.00	1920.00	4.20	4.20	333.27	49.93	-25.15	55.90	47.50	6.65	
1950.00	1950.00	1950.00	1950.00	4.27	4.27	333.27	49.93	-25.15	55.90	47.36	6.55	
1980.00	1980.00	1980.00	1980.00	4.34	4.34	333.27	49.93	-25.15	55.90	47.23	6.44	
2010.00	2010.00	2010.00	2010.00	4.41	4.41	333.27	49.93	-25.15	55.90	47.09	6.34	
2040.00	2040.00	2040.00	2040.00	4.47	4.47	333.27	49.93	-25.15	55.90	46.96	6.25	
2070.00	2070.00	2070.00	2070.00	4.54	4.54	333.27	49.93	-25.15	55.90	46.82	6.16	
2100.00	2100.00	2100.00	2100.00	4.61	4.61	333.27	49.93	-25.15	55.90	46.69	6.07	
2130.00	2130.00	2130.00	2130.00	4.68	4.68	333.27	49.93	-25.15	55.90	46.55	5.98	
2160.00	2160.00	2160.00	2160.00	4.74	4.74	333.27	49.93	-25.15	55.90	46.42	5.89	
2190.00	2190.00	2190.00	2190.00	4.81	4.81	333.27	49.93	-25.15	55.90	46.28	5.81	
2220.00	2220.00	2220.00	2220.00	4.88	4.88	333.27	49.93	-25.15	55.90	46.15	5.73	
2250.00	2250.00	2250.00	2250.00	4.94	4.94	333.27	49.93	-25.15	55.90	46.01	5.65	
2280.00	2280.00	2280.00	2280.00	5.01	5.01	333.27	49.93	-25.15	55.90	45.88	5.58	
2310.00	2310.00	2309.72	2309.72	5.08	5.08	134.94	49.95	-25.15	55.95	45.79	5.51	
2340.00	2340.00	2338.86	2338.86	5.15	5.14	135.25	50.30	-25.27	56.60	46.31	5.50	
2370.00	2369.98	2367.95	2367.94	5.22	5.21	135.91	51.07	-25.53	58.05	47.63	5.57	
2400.00	2399.95	2396.95	2396.91	5.28	5.28	136.87	52.26	-25.93	60.30	49.74	5.71	
2430.00	2429.90	2425.83	2425.74	5.35	5.34	138.05	53.86	-26.46	63.37	52.68	5.93	
2460.00	2459.81	2454.55	2454.38	5.42	5.41	139.38	55.85	-27.13	67.28	56.45	6.21	
2490.00	2489.69	2483.08	2482.80	5.49	5.47	140.79	58.24	-27.94	72.02	61.06	6.57	
2520.00	2519.51	2511.37	2510.94	5.56	5.53	142.20	61.01	-28.86	77.62	66.52	7.00	
2550.00	2549.29	2539.41	2538.78	5.64	5.60	143.58	64.14	-29.91	84.07	72.84	7.49	
2580.00	2579.00	2567.14	2566.27	5.71	5.66	144.88	67.61	-31.08	91.37	80.01	8.05	

Weatherford International Ltd.

Anticollision Report



Company:	Chi Energy	Date:	3/2/2012	Time:	10:59:53	Page:	3	
Field:	Eddy Co., NM (Nad 27)	Co-ordinate(NE) Reference:	Well: BDU #24, Grid North					
Reference Site:	Benson Delaware Unit #24	Vertical (TVD) Reference:	SITE 0.0					
Reference Well:	BDU #24						Db:	Sybase
Reference Wellpath:	1							

Site: Benson Delaware Unit #23
Well: BDU #23
Wellpath: 1 V0 Plan: Plan #3 V1

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
		MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft				
2610.00	2608.64	2594.56	2593.39	5.78	5.72	146.09	71.42	-32.36	99.51	88.03	8.66	
2640.00	2638.21	2621.62	2620.10	5.86	5.79	147.20	75.54	-33.74	108.49	96.88	9.34	
2670.00	2667.69	2648.30	2646.38	5.94	5.85	148.21	79.95	-35.22	118.30	106.55	10.07	
2700.00	2697.08	2674.58	2672.18	6.02	5.92	149.10	84.64	-36.80	128.91	117.04	10.85	
2730.00	2726.38	2700.70	2697.77	6.10	5.98	149.91	89.63	-38.47	140.32	128.31	11.69	
2760.00	2755.57	2728.13	2724.61	6.19	6.05	150.75	94.99	-40.27	152.25	140.11	12.54	
2790.00	2784.74	2755.51	2751.40	6.28	6.13	151.61	100.34	-42.07	164.31	152.04	13.39	
2820.00	2813.91	2782.90	2778.20	6.37	6.20	152.35	105.70	-43.86	176.39	163.99	14.22	
2850.00	2843.07	2810.28	2804.99	6.47	6.27	153.00	111.05	-45.66	188.50	175.96	15.03	
2880.00	2872.24	2837.67	2831.79	6.56	6.35	153.56	116.40	-47.45	200.62	187.94	15.82	
2910.00	2901.41	2865.05	2858.59	6.66	6.43	154.07	121.76	-49.25	212.76	199.95	16.60	
2940.00	2930.58	2892.43	2885.38	6.76	6.51	154.52	127.11	-51.05	224.91	211.96	17.36	
2970.00	2959.75	2919.82	2912.18	6.86	6.59	154.92	132.46	-52.84	237.07	223.98	18.11	
3000.00	2988.91	2947.20	2938.97	6.96	6.67	155.28	137.82	-54.64	249.24	236.01	18.84	
3030.00	3018.08	2974.59	2965.77	7.07	6.75	155.61	143.17	-56.44	261.42	248.05	19.55	
3060.00	3047.25	3001.97	2992.56	7.17	6.83	155.91	148.52	-58.23	273.61	260.10	20.25	
3090.00	3076.42	3029.35	3019.36	7.28	6.92	156.19	153.88	-60.03	285.80	272.14	20.93	
3120.00	3105.59	3056.74	3046.16	7.39	7.01	156.44	159.23	-61.83	297.99	284.20	21.60	
3150.00	3134.75	3084.12	3072.95	7.50	7.09	156.67	164.58	-63.62	310.19	296.25	22.25	
3180.00	3163.92	3111.51	3099.75	7.61	7.18	156.89	169.94	-65.42	322.40	308.31	22.90	
3210.00	3193.09	3138.89	3126.54	7.72	7.27	157.09	175.29	-67.22	334.60	320.38	23.52	
3240.00	3222.26	3166.28	3153.34	7.83	7.36	157.27	180.64	-69.01	346.81	332.44	24.13	
3270.00	3251.42	3193.66	3180.13	7.94	7.44	157.45	185.99	-70.81	359.03	344.51	24.73	
3300.00	3280.59	3221.04	3206.93	8.06	7.54	157.61	191.35	-72.61	371.24	356.58	25.32	
3330.00	3309.76	3248.43	3233.72	8.17	7.63	157.76	196.70	-74.40	383.46	368.65	25.90	
3360.00	3338.93	3275.81	3260.52	8.29	7.72	157.90	202.05	-76.20	395.68	380.73	26.46	
3390.00	3368.10	3303.20	3287.32	8.41	7.81	158.04	207.41	-78.00	407.90	392.80	27.01	
3420.00	3397.26	3330.58	3314.11	8.53	7.90	158.16	212.76	-79.79	420.13	404.88	27.55	
3450.00	3426.43	3357.96	3340.91	8.64	8.00	158.28	218.11	-81.59	432.35	416.95	28.08	
3480.00	3455.60	3385.35	3367.70	8.76	8.09	158.39	223.47	-83.39	444.58	429.03	28.60	
3510.00	3484.77	3412.73	3394.50	8.88	8.19	158.50	228.82	-85.18	456.81	441.11	29.10	
3540.00	3513.94	3440.12	3421.29	9.01	8.28	158.60	234.17	-86.98	469.04	453.19	29.60	
3570.00	3543.10	3467.50	3448.09	9.13	8.38	158.69	239.53	-88.78	481.27	465.27	30.09	
3600.00	3572.27	3494.88	3474.89	9.25	8.48	158.78	244.88	-90.57	493.50	477.35	30.57	
3630.00	3601.44	3522.27	3501.68	9.37	8.58	158.87	250.23	-92.37	505.73	489.43	31.03	
3660.00	3630.61	3549.65	3528.48	9.50	8.67	158.95	255.59	-94.16	517.96	501.52	31.49	
3690.00	3659.78	3577.04	3555.27	9.62	8.77	159.03	260.94	-95.96	530.20	513.60	31.94	
3720.00	3688.94	3604.42	3582.07	9.75	8.87	159.11	266.29	-97.76	542.43	525.68	32.38	
3750.00	3718.11	3631.81	3608.86	9.87	8.97	159.18	271.65	-99.55	554.67	537.77	32.81	
3780.00	3747.28	3659.19	3635.66	10.00	9.07	159.25	277.00	-101.35	566.91	549.85	33.23	
3810.00	3776.45	3686.57	3662.45	10.12	9.17	159.31	282.35	-103.15	579.14	561.93	33.65	
3840.00	3805.61	3713.96	3689.25	10.25	9.27	159.38	287.70	-104.94	591.38	574.02	34.06	
3870.00	3834.78	3741.34	3716.05	10.38	9.37	159.44	293.06	-106.74	603.62	586.10	34.46	
3900.00	3863.95	3768.73	3742.84	10.51	9.47	159.49	298.41	-108.54	615.86	598.19	34.85	
3930.00	3893.12	3796.11	3769.64	10.64	9.58	159.55	303.76	-110.33	628.10	610.27	35.23	
3960.00	3922.29	3823.49	3796.43	10.77	9.68	159.60	309.12	-112.13	640.34	622.36	35.61	
3990.00	3951.45	3850.88	3823.23	10.89	9.78	159.65	314.47	-113.93	652.58	634.44	35.98	
4020.00	3980.62	3878.26	3850.02	11.02	9.88	159.70	319.82	-115.72	664.82	646.53	36.34	
4050.00	4009.79	3905.65	3876.82	11.15	9.99	159.75	325.18	-117.52	677.06	658.61	36.70	
4080.00	4038.96	3933.03	3903.62	11.28	10.09	159.80	330.53	-119.32	689.30	670.70	37.05	
4110.00	4068.13	3960.41	3930.41	11.41	10.19	159.84	335.88	-121.11	701.55	682.78	37.39	

Weatherford International Ltd.

Anticollision Report



Weatherford

Company:	Chi Energy	Date:	3/2/2012	Time:	10:59:53	Page:	4	
Field:	Eddy Co., NM (Nad 27)	Reference Site:	Benson Delaware Unit #24	Co-ordinate(NE) Reference:	Well: BDU #24, Grid North			
Reference Well:	BDU #24	Vertical (TVD) Reference:	SITE 0.0					
Reference Wellpath:	1						Db:	Sybase

Site: Benson Delaware Unit #23
 Well: BDU #23
 Wellpath: 1 V0 Plan: Plan #3 V1

Inter-Site Error: 0.00 ft

Reference MD ft	TVD ft	Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Distance ft	Edge Distance ft	Separation Factor	Warning
		MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft				
4140.00	4097.29	3987.80	3957.21	11.55	10.30	159.89	341.24	-122.91	713.79	694.87	37.73	
4170.00	4126.46	4015.18	3984.00	11.68	10.40	159.93	346.59	-124.71	726.03	706.96	38.06	
4200.00	4155.63	4042.57	4010.80	11.81	10.51	159.97	351.94	-126.50	738.27	719.04	38.39	
4230.00	4184.80	4069.95	4037.59	11.94	10.61	160.01	357.30	-128.30	750.52	731.13	38.71	
4260.00	4213.96	4097.33	4064.39	12.07	10.72	160.04	362.65	-130.10	762.76	743.21	39.02	
4290.00	4243.13	4124.72	4091.18	12.21	10.82	160.08	368.00	-131.89	775.00	755.30	39.33	
4320.00	4272.30	4152.10	4117.98	12.34	10.93	160.12	373.36	-133.69	787.25	767.39	39.64	
4350.00	4301.47	4179.49	4144.78	12.47	11.04	160.15	378.71	-135.49	799.49	779.47	39.94	
4380.00	4330.64	4206.87	4171.57	12.61	11.14	160.18	384.06	-137.28	811.74	791.56	40.23	
4410.00	4359.80	4234.26	4198.37	12.74	11.25	160.22	389.41	-139.08	823.98	803.64	40.52	
4440.00	4388.97	4261.64	4225.16	12.87	11.36	160.25	394.77	-140.88	836.23	815.73	40.80	
4470.00	4418.14	4289.02	4251.96	13.01	11.46	160.28	400.12	-142.67	848.47	827.82	41.08	
4500.00	4447.31	4316.41	4278.75	13.14	11.57	160.31	405.47	-144.47	860.72	839.90	41.35	
4530.00	4476.48	4343.79	4305.55	13.28	11.68	160.34	410.83	-146.26	872.96	851.99	41.62	
4560.00	4505.64	4371.18	4332.35	13.41	11.79	160.36	416.18	-148.06	885.21	864.08	41.89	
4590.00	4534.81	4398.56	4359.14	13.55	11.89	160.39	421.53	-149.86	897.45	876.16	42.15	
4620.00	4563.98	4425.94	4385.94	13.68	12.00	160.42	426.89	-151.65	909.70	888.25	42.40	
4650.00	4593.15	4453.33	4412.73	13.82	12.11	160.44	432.24	-153.45	921.95	900.33	42.66	
4680.00	4622.32	4480.71	4439.53	13.95	12.22	160.47	437.59	-155.25	934.19	912.42	42.91	
4710.00	4651.48	4508.10	4466.32	14.09	12.33	160.49	442.95	-157.04	946.44	924.51	43.15	
4740.00	4680.65	4535.48	4493.12	14.22	12.44	160.52	448.30	-158.84	958.69	936.59	43.39	
4770.00	4709.82	4562.86	4519.91	14.36	12.54	160.54	453.65	-160.64	970.93	948.68	43.63	
4800.00	4738.99	4590.25	4546.71	14.50	12.65	160.56	459.01	-162.43	983.18	960.76	43.86	
4830.00	4768.15	4617.63	4573.51	14.63	12.76	160.58	464.36	-164.23	995.43	972.85	44.09	
4860.00	4797.32	4645.02	4600.30	14.77	12.87	160.61	469.71	-166.03	1007.67	984.93	44.32	
4890.00	4826.49	4672.40	4627.10	14.91	12.98	160.63	475.07	-167.82	1019.92	997.02	44.54	
4920.00	4855.66	4699.79	4653.89	15.04	13.09	160.65	480.42	-169.62	1032.17	1009.11	44.76	
4950.00	4884.83	4727.17	4680.69	15.18	13.20	160.67	485.77	-171.42	1044.42	1021.19	44.97	
4980.00	4913.99	4754.55	4707.48	15.32	13.31	160.69	491.12	-173.21	1056.66	1033.28	45.18	
5010.00	4943.16	4781.94	4734.28	15.45	13.42	160.71	496.48	-175.01	1068.91	1045.36	45.39	
5040.00	4972.33	4809.32	4761.08	15.59	13.53	160.72	501.83	-176.81	1081.16	1057.45	45.60	
5070.00	5001.50	4836.71	4787.87	15.73	13.64	160.74	507.18	-178.60	1093.41	1069.53	45.80	
5100.00	5030.67	4864.09	4814.67	15.87	13.75	160.76	512.54	-180.40	1105.65	1081.62	46.00	
5130.00	5059.83	4891.47	4841.46	16.00	13.86	160.78	517.89	-182.20	1117.90	1093.71	46.20	
5160.00	5089.00	4918.86	4868.26	16.14	13.97	160.79	523.24	-183.99	1130.15	1105.79	46.39	
5190.00	5118.17	4946.24	4895.05	16.28	14.09	160.81	528.60	-185.79	1142.40	1117.88	46.59	
5220.00	5147.34	4973.63	4921.85	16.42	14.20	160.83	533.95	-187.59	1154.65	1129.96	46.78	
5250.00	5176.51	5001.01	4948.64	16.56	14.31	160.84	539.30	-189.38	1166.90	1142.05	46.96	
5274.16	5200.00	5023.07	4970.23	16.67	14.40	160.86	543.62	-190.83	1176.76	1151.78	47.11	



Weatherford

Weatherford Drilling Services

GeoDec v5.03

Report Date: March 02, 2012
 Job Number: _____
 Customer: Chi Energy
 Well Name: Benson Delaware Unit #24
 API Number: _____
 Rig Name: _____
 Location: Eddy Co., NM
 Block: _____
 Engineer: R Joyner

US State Plane 1927	Geodetic Latitude / Longitude
System: New Mexico East 3001 (NON-EXACT)	System: Latitude / Longitude
Projection: SPC27 Transverse Mercator	Projection: Geodetic Latitude and Longitude
Datum: NAD 1927 (NADCON CONUS)	Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866	Ellipsoid: Clarke 1866
North/South 611007.160 USFT	Latitude 32.6791228 DEG
East/West 622876.280 USFT	Longitude -103.9339814 DEG
Grid Convergence: .22°	
Total Correction: +7.44°	

Geodetic Location WGS84 Elevation = 0.0 Meters
 Latitude = 32.67912° N 32° 40 min 44.842 sec
 Longitude = 103.93398° W 103° 56 min 2.333 sec

Magnetic Declination =	7.66°	[True North Offset]	
Local Gravity =	.9988 g	Checksum =	6590
Local Field Strength =	48771 nT	Magnetic Vector X =	23786 nT
Magnetic Dip =	60.52°	Magnetic Vector Y =	3201 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z =	42456 nT
Spud Date =	Jun 20, 2012	Magnetic Vector H =	24001 nT

Signed: _____

Date: _____

Weatherford International Ltd.
WFT Plan Report - X & Y's

Company: Chi Energy
Time: 09:53:37 Page: 1
Field: Eddy Co., NM (Nad 27)
Reference: Well: BDU #23, Grid North
Site: Benson Delaware Unit #23
Reference: SITE 0.0
Well: BDU #23
Reference: Well (0.00N,0.00E,341.45Azi)
Wellpath: 1
Method: Minimum Curvature Db: Sybase

Date: 3/2/2012
Co-ordinate(NE)
Vertical (TVD)
Section (VS)
Survey Calculation

Plan: Plan #3
7/14/2011

Date Composed:

1
Principal: Yes
From Surface

Version:

Tied-to:

Field: Eddy Co., NM (Nad 27)

Map System: US State Plane Coordinate System 1927
New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866)
Well Centre
Sys Datum: Mean Sea Level
IGRF2010

Map Zone:

Coordinate System:

Geomagnetic Model:

Site: Benson Delaware Unit #23

Site Position:
32 40 45.337 N
From: Geographic
103 56 2.625 W
Position Uncertainty: 0.00 ft
Grid
Ground Level: 3464.00 ft
0.22 deg

Northing: 611057.09 ft Latitude:
Easting: 622851.13 ft Longitude:
North Reference:
Grid Convergence:

Well: BDU #23

Slot Name:

Well Position: +N/-S 0.00 ft
32 40 45.337 N
+E/-W 0.00 ft
103 56 2.625 W
Position Uncertainty: 0.00 ft

Northing: 611057.09 ft Latitude:
Easting: 622851.13 ft Longitude:

Wellpath: 1
Surface

Drilled From:

Tie-on Depth:

0.00 ft
Current Datum: SITE
Datum: Mean Sea Level
Magnetic Data: 6/15/2012

Height 0.00 ft Above System

Declination:

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7.67 deg
 Field Strength: 48776 nT Mag Dip Angle:
 60.52 deg

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

341.45

Plan Section Information								
Turn	MD	Incl	Azim	TVD	+N/-S	+E/-W	DLS	Build
deg/100ft	ft	deg/100ft	deg/100ft	ft	ft	ft		
0.00	0.00	0.00	341.45	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	341.45	2300.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	341.45	2696.66	38.91	-13.06	3.00	3.00
0.00	341.45	11.90	341.45	5200.00	539.59	-181.09	0.00	0.00
0.00	0.00	0.00	Pbh1					

MapN	MD	Incl	Azim	TVD	N/S	E/W	VS	DLS
ft	ft	deg	deg	ft	ft	ft	ft	deg/100ft
2300.00	0.00	341.45	2300.00	0.00	0.00	0.00	0.00	0.00
611057.09	622851.13	Kop	2399.95	2.48	-0.83	2.62	3.00	
2400.00	3.00	341.45	2499.63	9.92	-3.33	10.46	3.00	
611059.57	622850.30	6.00	2598.77	22.29	-7.48	23.51	3.00	
2500.00	6.00	341.45	2693.81	38.91	-13.06	41.04	3.00	
611067.01	622847.80	9.00	2696.66	11.90	341.45	2693.81	38.91	-13.06
2600.00	9.00	341.45	2697.08	39.56	-13.28	41.73	0.00	
611079.38	622843.65	11.90	2794.93	59.11	-19.84	62.35	0.00	
2696.66	11.90	341.45	2892.78	78.66	-26.40	82.97	0.00	
611096.00	622838.07	Hold	2990.64	98.21	-32.96	103.59	0.00	
2700.00	11.90	341.45	3088.49	117.76	-39.52	124.21	0.00	
611096.66	622837.86	11.90	3186.34	137.31	-46.08	144.83	0.00	
2800.00	11.90	341.45	3284.19	156.85	-52.64	165.45	0.00	
611116.20	622831.30	11.90	3382.04	176.40	-59.20	186.07	0.00	
2900.00	11.90	341.45	3479.89	195.95	-65.76	206.69	0.00	
611135.75	622824.73	11.90	3577.74	215.50	-72.32	227.31	0.00	
3000.00	11.90	341.45	3186.34	137.31	-46.08	144.83	0.00	
611155.30	622818.17	11.90	3284.19	156.85	-52.64	165.45	0.00	
3100.00	11.90	341.45	3382.04	176.40	-59.20	186.07	0.00	
611174.85	622811.61	11.90	3479.89	195.95	-65.76	206.69	0.00	
3200.00	11.90	341.45	3577.74	215.50	-72.32	227.31	0.00	
611194.40	622805.05	11.90	3186.34	137.31	-46.08	144.83	0.00	
3300.00	11.90	341.45	3284.19	156.85	-52.64	165.45	0.00	
611213.95	622798.49	11.90	3382.04	176.40	-59.20	186.07	0.00	
3400.00	11.90	341.45	3479.89	195.95	-65.76	206.69	0.00	
611233.50	622791.93	11.90	3577.74	215.50	-72.32	227.31	0.00	
3500.00	11.90	341.45	3186.34	137.31	-46.08	144.83	0.00	
611253.04	622785.37	11.90	3284.19	156.85	-52.64	165.45	0.00	
3600.00	11.90	341.45	3382.04	176.40	-59.20	186.07	0.00	
611272.59	622778.81							

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3700.00	11.90	341.45	3675.59	235.05	-78.88	247.93	0.00
611292.14		622772.25					
3800.00	11.90	341.45	3773.44	254.60	-85.44	268.55	0.00
611311.69		622765.69					
3900.00	11.90	341.45	3871.29	274.14	-92.00	289.17	0.00
611331.24		622759.13					
4000.00	11.90	341.45	3969.15	293.69	-98.56	309.79	0.00
611350.79		622752.57					
4100.00	11.90	341.45	4067.00	313.24	-105.13	330.41	0.00
611370.33		622746.01					
4200.00	11.90	341.45	4164.85	332.79	-111.69	351.03	0.00
611389.88		622739.45					
4300.00	11.90	341.45	4262.70	352.34	-118.25	371.65	0.00
611409.43		622732.89					
4400.00	11.90	341.45	4360.55	371.89	-124.81	392.27	0.00
611428.98		622726.33					
4500.00	11.90	341.45	4458.40	391.44	-131.37	412.89	0.00
611448.53		622719.77					
4600.00	11.90	341.45	4556.25	410.98	-137.93	433.51	0.00
611468.08		622713.21					
4700.00	11.90	341.45	4654.10	430.53	-144.49	454.13	0.00
611487.62		622706.64					
4800.00	11.90	341.45	4751.95	450.08	-151.05	474.75	0.00
611507.17		622700.08					
4900.00	11.90	341.45	4849.80	469.63	-157.61	495.37	0.00
611526.72		622693.52					
5000.00	11.90	341.45	4947.66	489.18	-164.17	515.99	0.00
611546.27		622686.96					
5100.00	11.90	341.45	5045.51	508.73	-170.73	536.61	0.00
611565.82		622680.40					
5200.00	11.90	341.45	5143.36	528.27	-177.29	557.23	0.00
611585.37		622673.84					
5257.89	11.90	341.45	5200.00	539.59	-181.09	569.17	0.00
611596.68		622670.04	Pbh1				

Targets

Map	Name	Latitude			Longitude			Map	
Easting	ft	Deg	Min	Sec	Deg	Min	Sec	+N/-S	+E/-W
		Dip.			Dir.			ft	ft
	Pbh1							5200.00	
622670.04		32	40	50.683 N	103	56	4.720 W	539.59	-181.09
		-Plan hit target							

Casing Points

MD	TVD	Diameter	Hole Size	Name
ft	ft	in	in	
2200.00	2200.00	0.000	0.000	8 5/8
Annotation				
MD	TVD			
ft	ft			
2300.00	2300.00	Kop		
2696.66	2693.81	Hold		

5257.88 5199.99 CHI BENSON DELAWARE UNIT _23 P3 SVY[1].TXT
Pbh]

Formations MD	TVD Dip Angle	Formations Dip Direction	Lithology
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2000 psi System

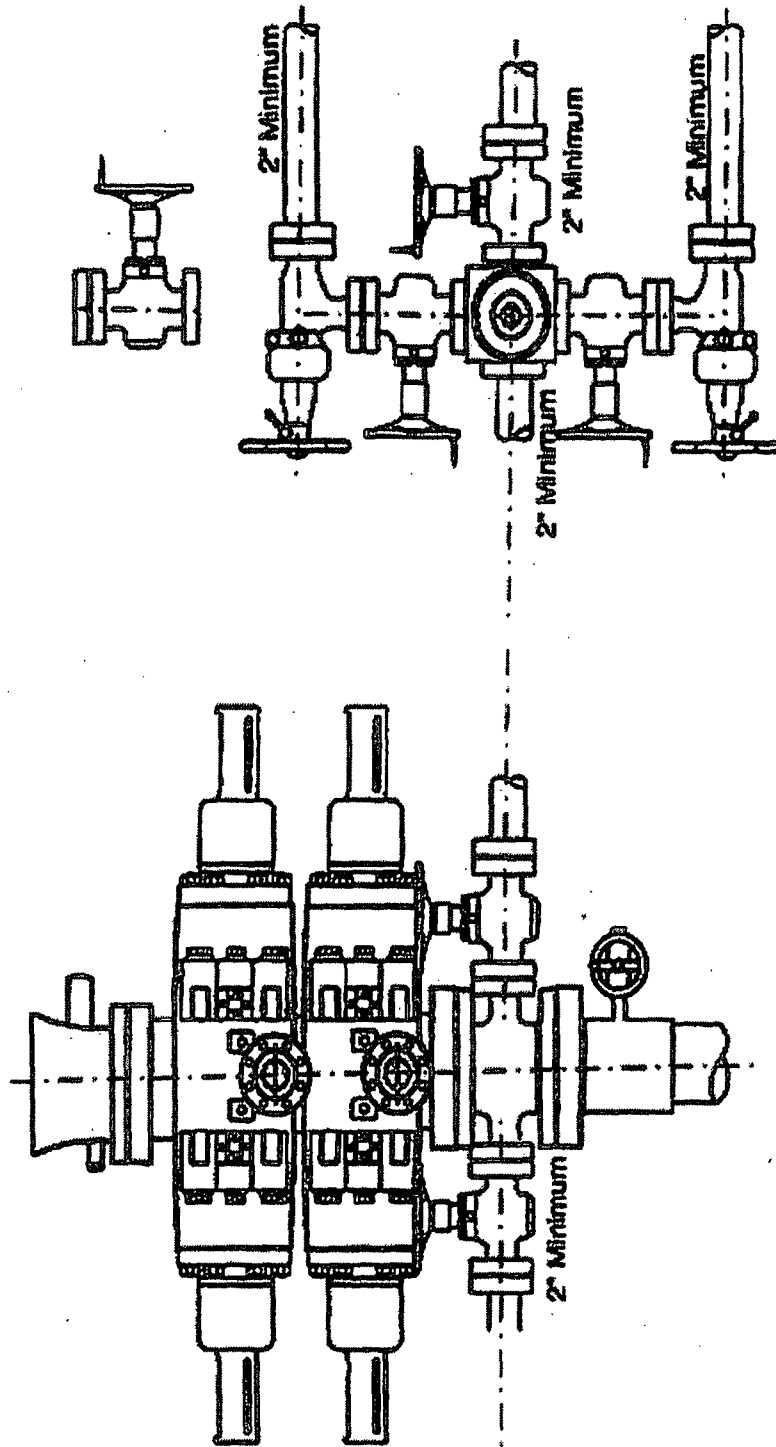
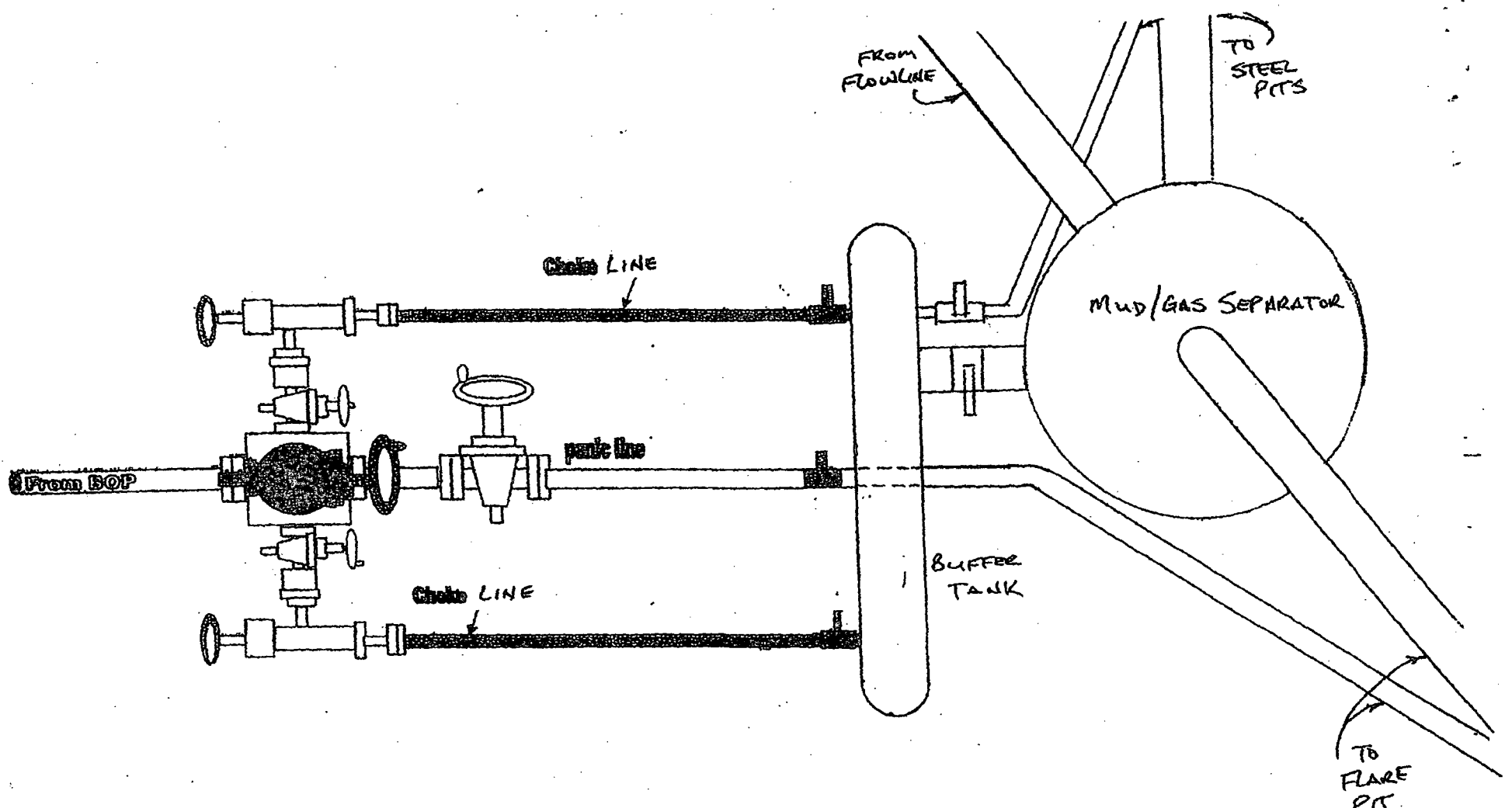


Figure 3-1



2000#/3000# BOP manifold system
FOR POTENTIAL H₂S ENVIRONMENT

**CHI OPERATING, INC., BENSON DELAWARE FEDERAL UNIT,
WELL NO. 24
API: 30-**

A- Sec. 11, T19S-R30E: 1040' FNL & 125' FEL Eddy Co., NM

DESIGN: Closed Loop System with roll-off steel bins (pits)

CRI/Hobbs will supply (2) bins () volume, rails and transportation relating to the Close Loop system. Specifications of Close Loop System attached.

Contacts: Gary Wallace 432-638-4076 Office # 575-393-1079

Scomi Oil Tool: Supervisor: Armando Soto – 432-553-7978 Hobbs, NM

Monitoring 24 hour service

Equipment:

Centrifuges (brand): Derrick

Rig Shakers (brand): Brandt

D-watering Unit

Air pumps on location for immediate remediation process

Layout of Close Loop System with bins, centrifuges and shakers attached.

Cuttings and associated liquids will be hauled to a State regulated third party disposal site: CRI (Controlled Recovery, Inc.) Disposal Facility Permit # R9166

2-250 bbl tanks to hold fluid

2- CRI Bins with track system

2- 500 bbl frac tanks for fresh water

2-500 bbl frac tanks for brine water

OPERATIONS:

Closed Loop equipment will be inspected daily by each tour and any necessary maintenance performed.

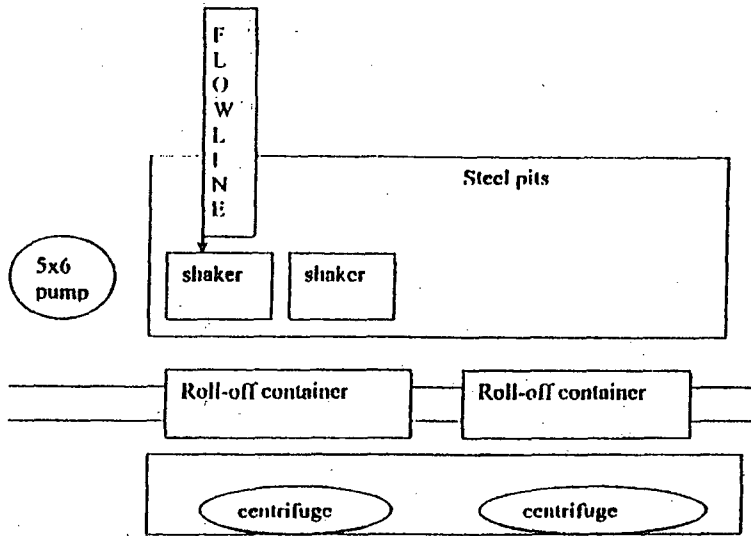
Any leak in system will be repaired and or/contained immediately

OCD will be notified within 48 hours of the spill.

Remediation process started immediately

CLOSURE:

During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI (Controlled Recovery Incorporated) Disposal Facility Permit # R9166



This will be maintained by 24 hour solids control personnel that stay on location.

TOMMY WILSON
CLS
CLOSED LOOP
SPECIALTY

Office: 575.746.1689

Cell: 575.748.6367

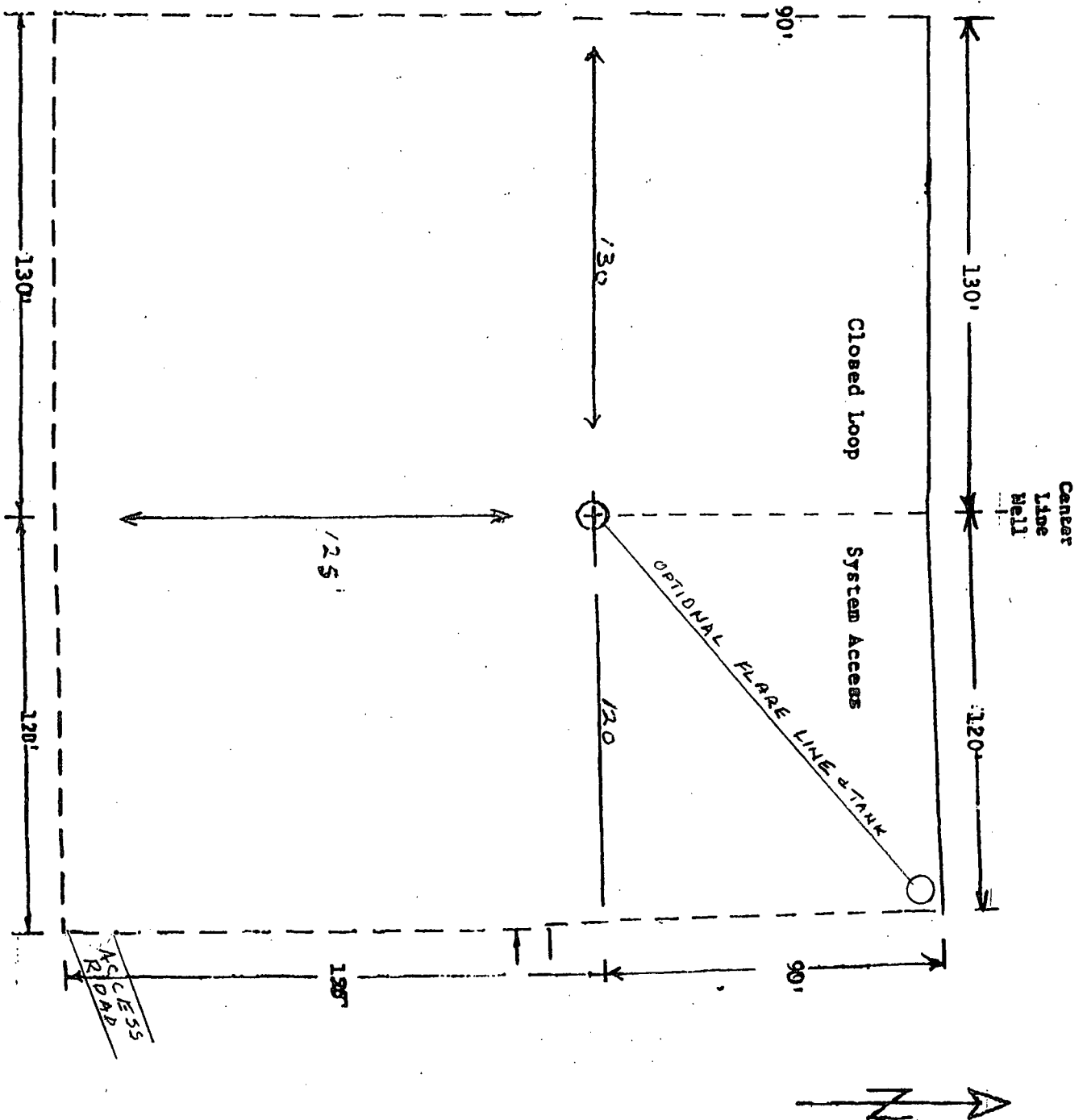


EXHIBIT "A"

CHI OPERATING, INC.

Benson Delaware Federal Unit, Well No. 24

Surface Hole: 1040' FNL & 125' FEL -Sec. 11-T19S-R30E

Bottom Hole: 1650' FNL & 330' FEL -Sec. 11-T19S-R30E

Existing Access Roads:

Proposed Access Road:

Drilling Location
H2S Safety Equipment Diagram

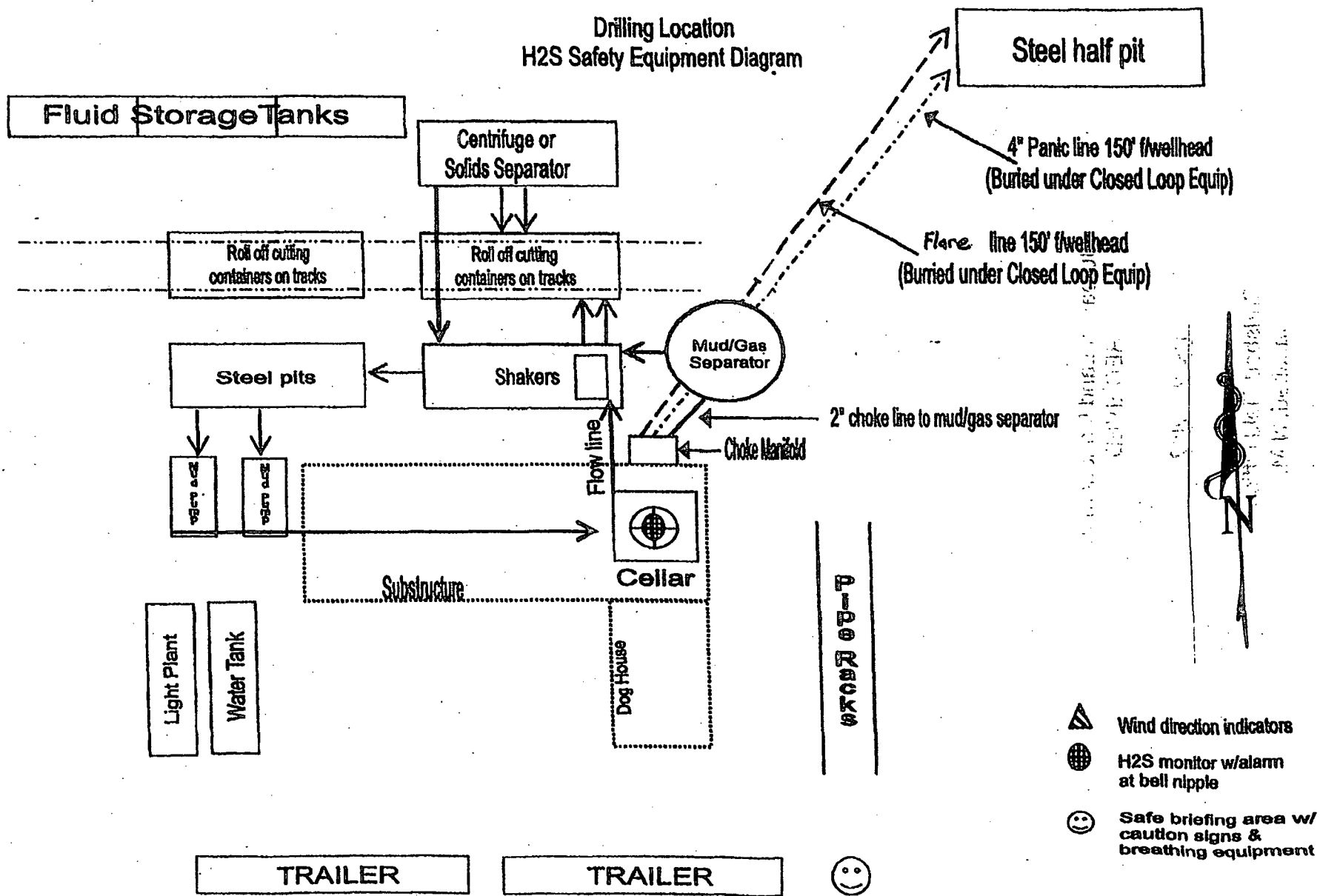


EXHIBIT "F"

Chi Operating, Inc.

H₂S DRILLING CONTINGENCY PLAN

I. HYDROGEN SULFIDE TRAINING

All key personnel whether regularly assigned, contracted or employed on an unscheduled basis will receive or represent that they have received training in accordance with the general training requirements outlined in the API RP49 for safe drilling of wells containing hydrogen sulfide, Section 2.

In addition, supervisory personnel will be trained in the following areas:

1. The corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention in well control procedures.
2. The contents and requirements of the H₂S drilling operations plan.

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

1. Well Control Equipment:

- a. Choke manifold with a minimum of one choke.
- b. Blind rams and pipe rams and pipe rams to accommodate all drill pipe sizes with a properly sized closing unit.

2. Protective Equipment:

- a. Proper protective breathing apparatus shall be readily accessible to all essential personnel on the drill site.

3. H₂S and Monitoring Equipment:

- a. Three portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens.

4. Visual Warning Systems:

- a. Wind direction indicators as shown on well site diagram.
- b. Caution/Danger signs shall be posted on roads providing direct access to location.

5. Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface. The Mud Log Unit will be cautioned to use a gas trap to detect H₂S and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas. If the gas monitor approaches #10, will prepare to shut-in well and at #10 will shut-in well and install 150' of flare line from the choke manifold to the mud separator and flare pit.

III. Emergency Procedures

- * In the event of a release of gas containing H₂S, the first responder (s) must
- * Evacuate any public places encompassed by the 100 ppm ROE
- * Be equipped with H₂S monitors and air packs in order to control the release..
- * Use the "Buddy System" to ensure no injuries occur during the response
- * Take precautions to avoid personal injury during the response.
- * Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- * Have received training in the :
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

IV Communications

Company Office: Chi Operating, Inc

432-685-5001

Key Personnel

Gary Womack Production Engineer. 432-685-5001
Cell Phone 432-634-8958

a. Cell phone communication available in all vehicles and at the drilling site.

b. EMERGENCY PHONE NUMBERS:

ARTESIA

Ambulance _____ 911
State Police _____ 575-746-2703
City Police _____ 575-746-2703
Sheriff's Office _____ 575-746-9888
Fire Department _____ 575-746-2701
New Mexico Oil Conservation Dept. _____ 575 748-1283

CARLSBAD

Ambulance. _____ 911
State Police No. _____ 575-885-2111
City Police No. _____ 575-221-7551
Fire Dept.: _____ 575-887-3798
US Bureau of Land Management _____ 575-234-5972

V Well Testing:

a. Drillstem testing, if required, will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. When drillstem testing intervals known to or reasonably expected to contain 100 ppm or more H₂S, the drillstem test will be conducted during daylight hours and formation fluids will not be flowed to the surface.

To whom it may it concern:

Chi Operating, Inc. will probably need the entire drilling pads for future use to service the three wells on the pad. Therefore there will not be any recovery plan at the present. The total size will be approximately the equivalent to 1.5 times the size of a normal pad, which is less than three times the normal reclaimed size.

**George R. Smith
POA agent for Chi Operating, Inc.**

MULTI POINT SURFACE USE AND OPERATIONS PLAN

CHI OPERATING, INC

Benson Delaware Unit, Well No. 24

1040' FNL & 125' FEL, Sec. 11 -T19S-R30E

Bottom Hole: 1650' FNL & 330' FEL, Sec. 11-T19S-R30E

Eddy County, New Mexico

Lease No.: NM-0560353

(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Hackberry Lake Topo map showing the location of the proposed well as staked. The well site location is approximately 36 road miles southeast of Artesia, NM. Traveling east of Artesia on U.S. Highway 82, NM Hwy 360 and county roads No. 250 and 251, there will be 33 miles of paved highway, plus 3 miles of existing gravel oilfield roads.
- B. Directions: Travel east from U. S. Highway #285 in Artesia, NM on U. S. Highway 82 for approximately 14 miles, turn southeast on NM Hwy 360 for approximately 13 miles to paved County Rd #251. Turn north on #251 for 1.8 mile to County Rd. # 250, then turn right on #250 for 3.8 miles to top of Nimenim Ridge. Turn south onto a gravel oilfield road just west of a cattle guard with a pipeline buried near the road. Continue south for .8 mile to a large tank battery and water injection pump house; turn right (west) for .25 mile to a pump jack, then south (left) for .63 mile to a P/A well site with a gas line tap. Turn right (west) for .3 mile, then south .25 mile to the Munchkin Fed. #1 well site. Turn west, north of the #1, for .2 mile to the access road on the left (south) side. Follow this road southeast then south to the southwest corner of the Munchkin Fed. #4 well pad. Turn southwest to the Munchkin Fed. #6 well pad and continue west to the southeast corner of the proposed well pad.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The existing access road will service the new well pad. The existing roads are color coded on Exhibit "A".
- B. Construction: The existing access road will be repaired and needed by grading and topping with compacted caliche.
- C. Turnouts: None required.
- D. Culverts: None
- E. Cuts and Fills: None.
- F. Gates, Cattle guards: One cattleguard all ready exists..
- G. Off Lease ROW: An off lease ROW No. NM-102279 was issued with a previous APD covering the existing access road in the E2 of Sec. 1-T19S-R30E.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. Chi Operating, Inc. has production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities and gas production-process equipment will be installed on the drilling pad. There is an existing 3" poly flow line for the No. 9 to the Benson Delaware Unit Fed. #6 well pad and tank battery

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the proposed access road and well site pad will be obtained from an approved pit on the drill site for the Wizard Federal #3 in the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 1-T19S-R30E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 500' X 500'.
- B. Mat Size: 225' X 165', plus 100' X 100' reserve pits on the north.
- C. Cut & Fill: The location will require a 1 foot cut on the north and fill to the south. There are undulating sand dunes 3 – 4 feet high that will need to be leveled.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

11. OTHER INFORMATION:

- A. Topography: The proposed location and access road is located in a area on top of and east of the Niminem Ridge. The location has an overall 2% slope to the southeast from an elevation of 3461' GL.
- B. Soil: The topsoil at the well site is a brownish red colored sandy loam with some caliche scatter on the surface. The soil is of the Largo loamy fine sands series.
- C. Flora and Fauna: The vegetation cover is a poor to fair grass cover of threeawn, dropseed, fluff grass and ring muhly along with plants of mesquite, creosote bush, broomweed, yucca, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in the area.
- E. Residences and Other Structures: None in the area except oil field equipment and tank batteries.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.
- H. There is some evidence of archaeological, historical or cultural sites in the area. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202 are conducting an archaeological survey, and their report will be submitted to the appropriate government agencies.

Chi Operating, Inc.
Benson Delaware Unit, Well No. 24
Page 4

12. OPERATOR'S REPRESENTATIVE:

- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Gary Womack
Chi Operating, Inc.
P. O. Box 1799
Midland, Texas 79701
Office Phone: (915) 685-5001
Cell Phone: (915) 634-8958

POWER OF ATTORNEY

DESIGNATION OF AGENT

LRE Operating, LLC. hereby names the following person as its agent:

Name of Agent: George R. Smith d/b /a/ Energy Administrative Services Company

Agent's Address: P.O. Box 458, Roswell, NM 88202

Agent's Telephone Number: (575) 623-4940

GRANT OF SPECIAL AUTHORITY

LRE Operating, LLC grants its agent the authority to act for it with the respect to the following only:

1. Executing forms required to be filed with the Oil Conservation Division of the New Mexico Energy, Minerals, and Natural Resources Department.
2. Executive forms required to be filed with the Bureau of Land Management of the Department of Interior of the United States of America.

EFFECTIVE DATE

This power of attorney is effective immediately.

RELIANCE ON THIS POWER OF ATTORNEY

Any person, including the agent, may rely upon the validity of this power of attorney or a copy of it unless that person knows it has terminated or is invalid.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHI OPERATING, INC
LEASE NO.:	NM0560353
WELL NAME & NO.:	24 BENSON DELAWARE FEDERAL UNIT
SURFACE HOLE FOOTAGE:	1040' FNL & 125' FEL
BOTTOM HOLE FOOTAGE:	1650' FNL & 330' FEL
LOCATION:	Section 11, 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.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
 - Pad Restriction**
 - OHV recreation area**
- Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- Road Section Diagram**
- Drilling**
 - Secretary's Potash
 - Logging Requirements
 - Waste Material and Fluids
- Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- Interim Reclamation**
- Final Abandonment & Reclamation**

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)

Surface disturbance of combined well pad limited to 90 feet north from proposed Benson Delaware Federal Unit #23 well bore in order to avoid archeological site.

OHV Recreation area

Pipelines (including surface lines) shall be buried a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. Power poles and associated ground structures (poles, guy wires) will not be placed within 20 feet of recreation trails. Guy wires must be equipped with a sleeve, tape or other industry approved apparatus that is highly visible during the day and reflective at night. Appropriate safety signage will be in place during all phases of the project. Upon completion of construction, the road shall be returned to pre-construction condition with no bumps or dips. All vehicle and equipment operators will observe speed limits and practice responsible defensive driving habits.

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) 234-6235 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

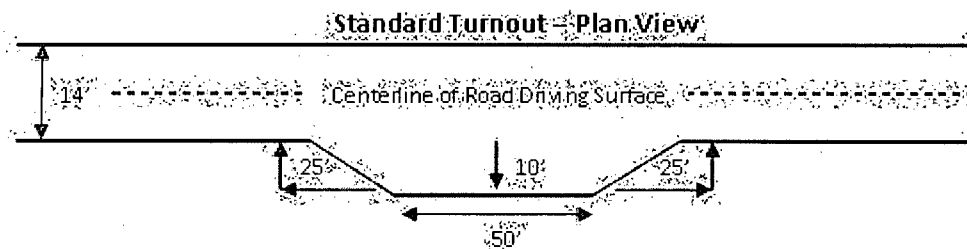
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

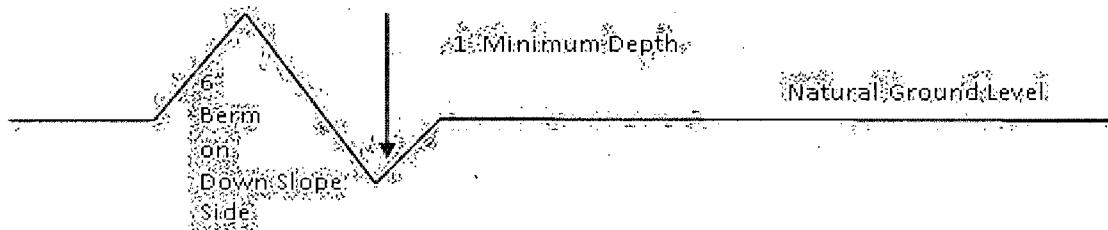


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outloping 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:

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

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

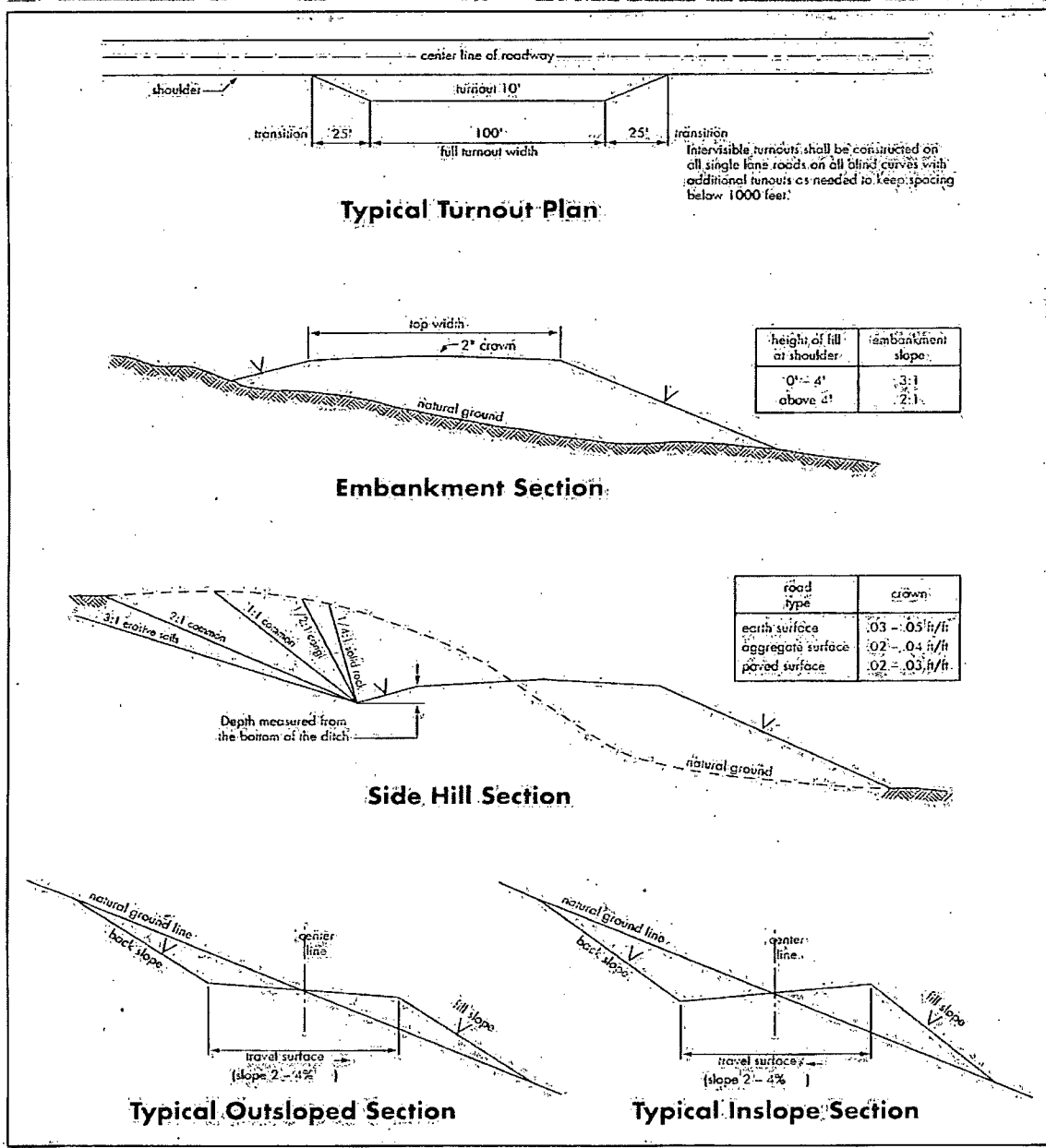
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. **Due to recent H₂S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements 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. **The record of the drilling rate along with the GR/N well log run from TD to surface 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.

Secretary's Potash

Possible brine/water flows in the Salado and Artesia groups.

Possible lost circulation in the Artesia group.

1. The 13-3/8 inch surface casing shall be set at **approximately 460 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **Additional cement may be required. Excess calculates to only 46%.**
 - 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 8-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash. Additional cement may be required. Excess cement calculates to negative 21%.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Additional cement may be required as the excess cement calculates to 14%.**
4. 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
 - 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. 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**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The results of the test shall be reported to the appropriate BLM office.

- d. 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.**
- e. 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.

D. DRILL STEM TEST

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

E. 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)

C. ELECTRIC LINES (not applied for)

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:

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

*Pounds of pure live seed:

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