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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-101
May 27, 2004

CEMENT TO COVER ALL OIL, GAS AND WATER BEARING ZONES

Division
ancis Dr.
87505

RECEIVED
MAR 16 2006
OCD-ARTESIA

Submit to appropriate District Office

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
Plantation Operating, LLC 2203 Timberloch Place, Suite 229, The Woodlands, Texas 77380	237788 [3] API Number 30-015-34697

[3] Property Code	[5] Property Name	[6] Well No.
35519	Cypress	1

[9] Proposed Pool 1	[10] Proposed Pool 2
South Carlsbad Morrow 73960	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	23S	27E		1280'	North	1650'	East	Eddy

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	F	3171'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	12,500'	Morrow	To Be Determined	ASAP

Depth to Groundwater 75' | Distance from nearest fresh water well < 1,000' | Distance from nearest surface water < 1,000'

Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 2400 bbls Drilling Method: Drilling

Closed-Loop System ☐ Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 ½"	13 3/8"	48#	350'	350	Surface
12 ¼"	9 5/8"	40#	2650'	1250	Surface
8 ¾"	5 ½"	17#	12,500'	1400	8000'

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

Operator proposes to drill well to 12,500' to the South Carlsbad Morrow formation.

BOP Program: 2k Hydril (see Exhibit 2) from surface casing to intermediate TD. Schaffer LWS or equivalent (Double-Ram Hydraulic) 5k series with Hydril 5K.

Series (See Exhibit 2A) from intermediate casing to total depth. Rotating head, PVT, flow monitors and mud gas Separator from the Wolfcamp to TD.

Mud Program:
0' - 500' Fresh Water, spud mud, lime for PH and LCM as needed for seepage.
500' - 2650' Brine Water, lime for PH and LCM as needed for seepage.
2650' - 9500' Fresh Water, lime for PH and LCM as needed for seepage.
9500' - TD Cut brine. 9.3 #/g, Caustic for PH, Starch for WL control and LCM as needed for seepage.

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Printed name: Donald P. Dotson, P.E.

Title: COO

E-mail Address: ddotson@plantationpetro.com

Date: 3/8/2006 Phone: 281-296-7222

OIL CONSERVATION DIVISION

Approved by: Paul W. Swenson

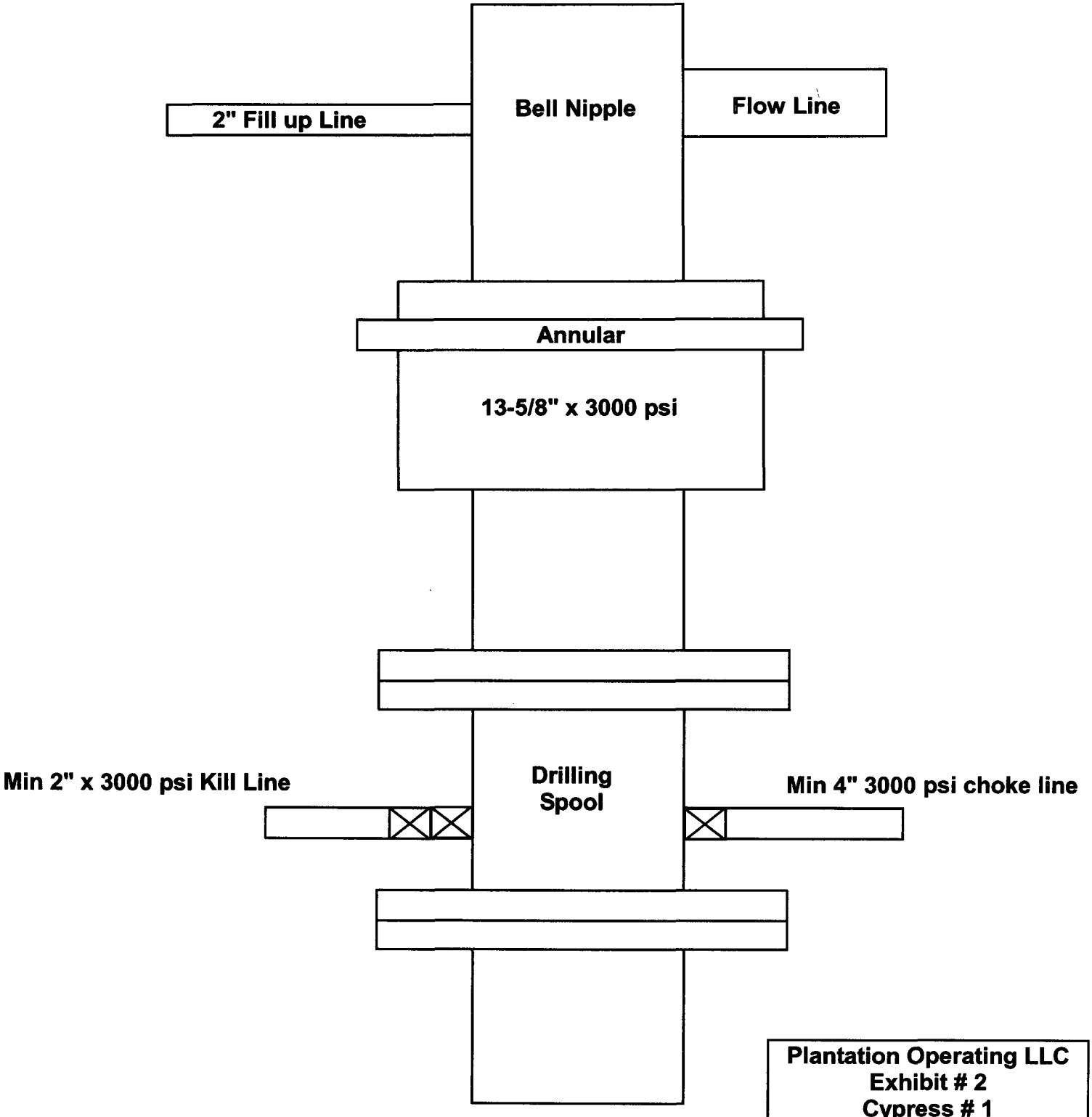
Title: District II Supervisor

Approval Date: MAR 16 2006 Expiration Date: MAR 16 2007

Conditions of Approval Attached ☐

Plantation Operating, LLC

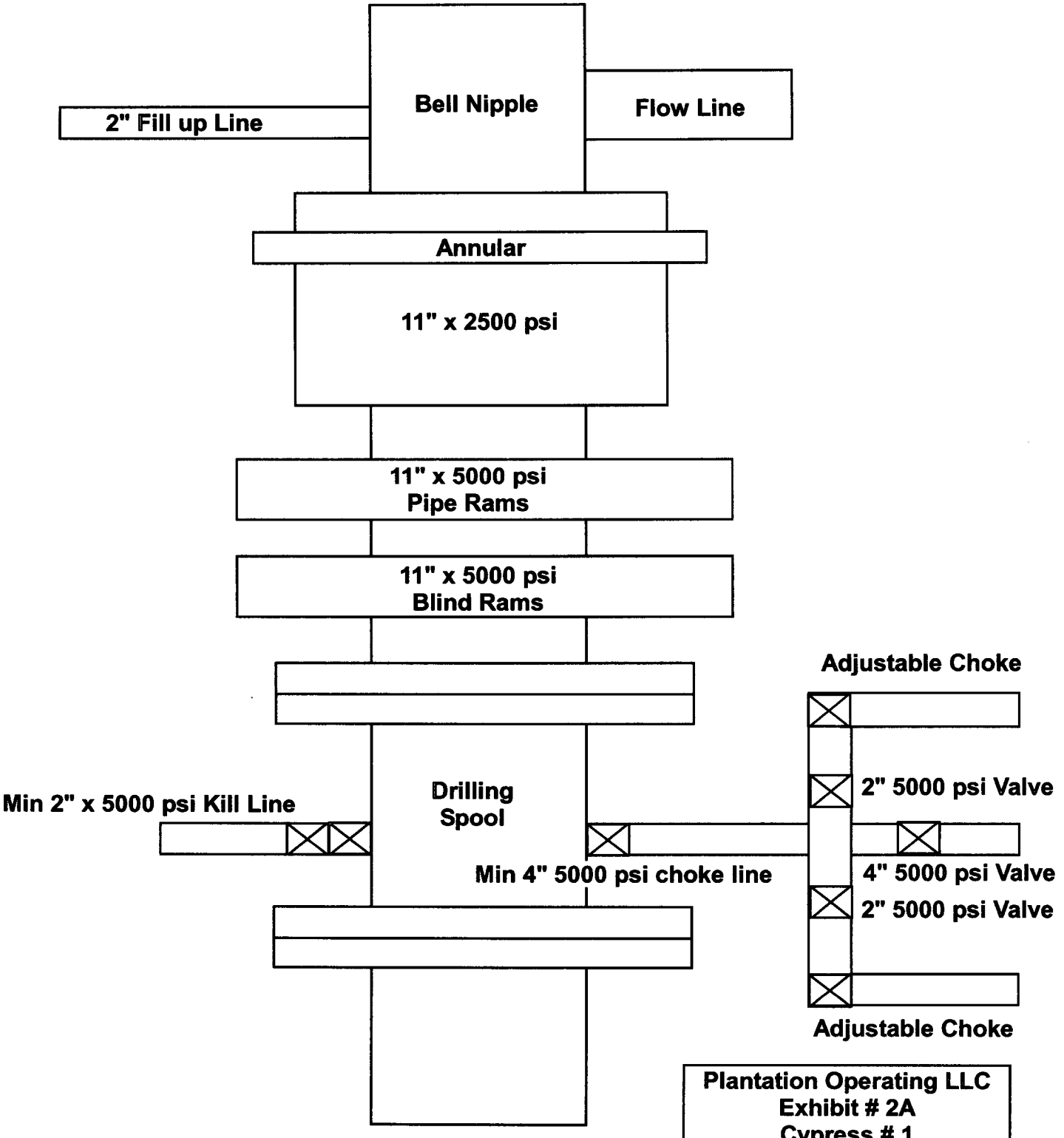
BOP Scematic for 12-1/4" Hole



Plantation Operating LLC
Exhibit # 2
Cypress # 1
Sec B-8, T-23S, R-27E
1280' FNL & 1650' FSL
Eddy County, NM

Plantation Operating, LLC

BOP Scematic for 8-3/4 or- 7-7/8" Hole



Plantation Operating LLC
Exhibit # 2A
Cypress # 1
Sec B-8, T-23S, R-27E
1280' FNL & 1650' FSL
Eddy County, NM

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 and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name

Property Code	Property Name	Well Number
	CYPRESS	1
OGRID No.	Operator Name	Elevation
	PLANTATION OPERATING, LLC	3171'

Surface Location

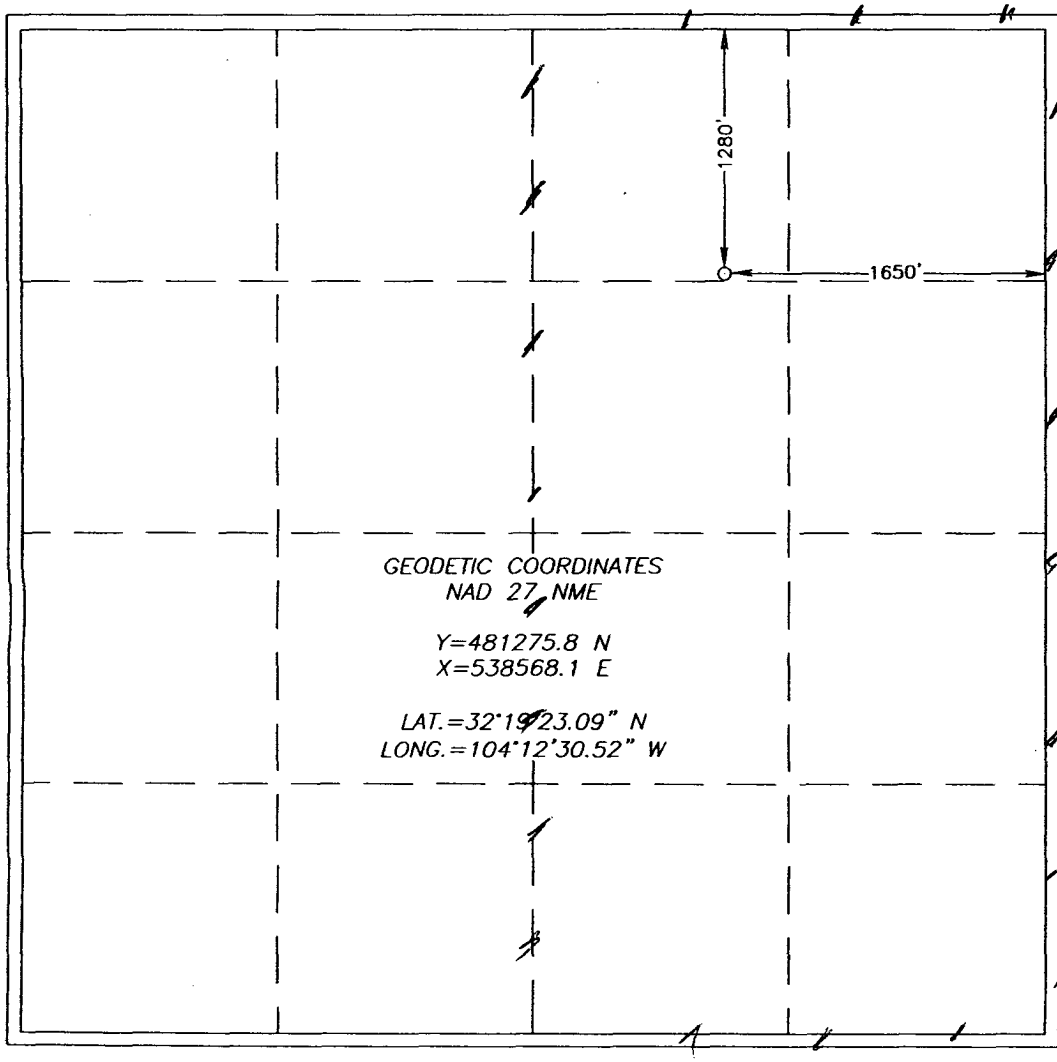
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	23-S	27-E		1280	NORTH	1650	EAST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Donald Deboe
Printed Name

COO
Title

3/15/06
Date

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 supervison, and that the same is true and correct to the best of my belief.

NOVEMBER 9, 2005
Date Surveyed JR

Signature & Seal of Professional Surveyor

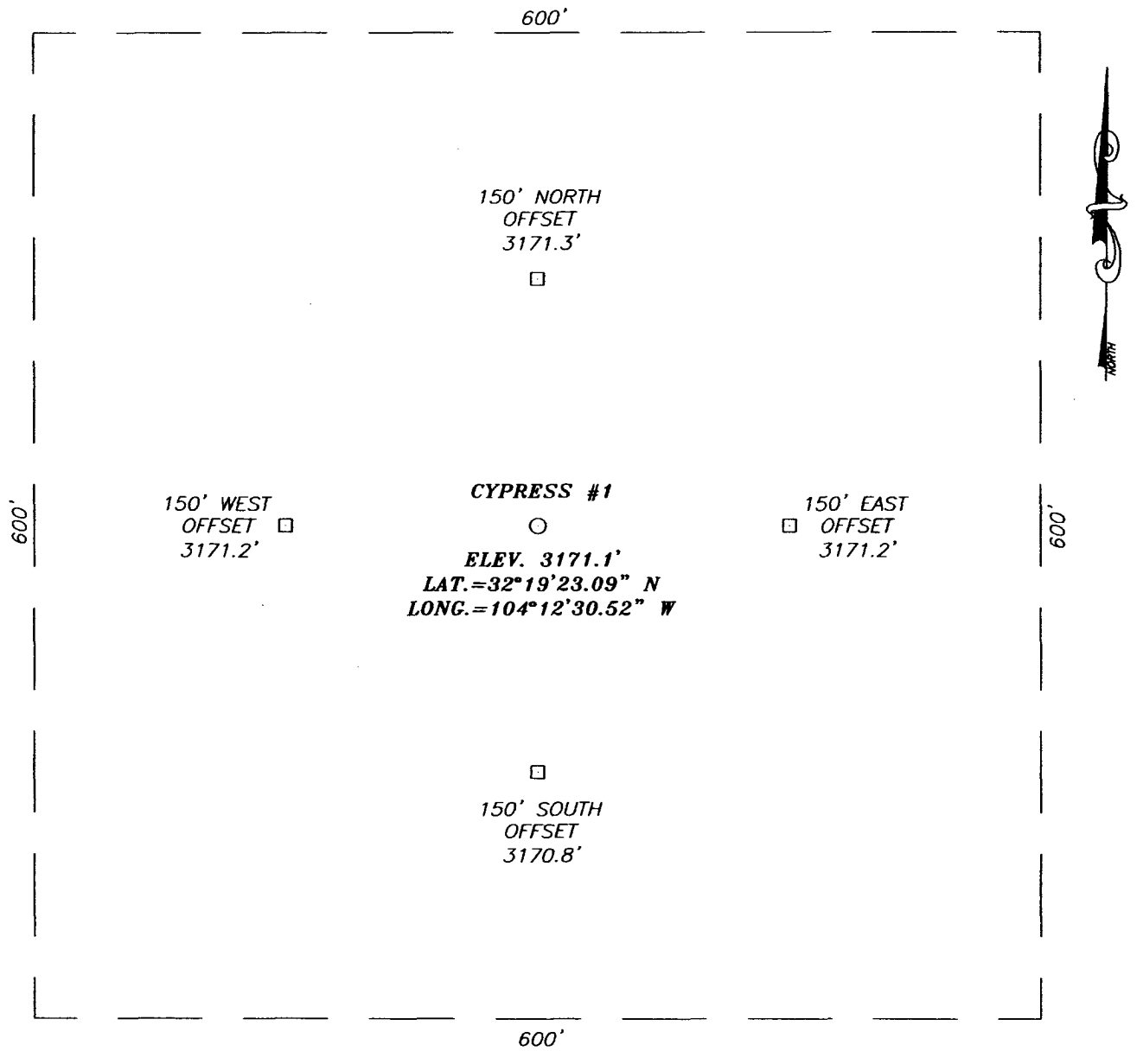
RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

11/11/05
05.11.1698

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

SECTION 8, TOWNSHIP 23 SOUTH, RANGE 27 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #285 (PECOS HWY.) AND CO. RD. #701 (THOMASON RD.) GO SOUTH ON CO. RD. #701 FOR APPROX. 3.5 MILES TO CO. RD. #757 (HARKNESS RD.) GO WEST ON CO. RD. #757 FOR APPROX. 0.3 MILES. THIS LOCATION IS APPROX. 0.2 MILES SOUTH.

100 0 100 200 Feet

Scale:1"=100'

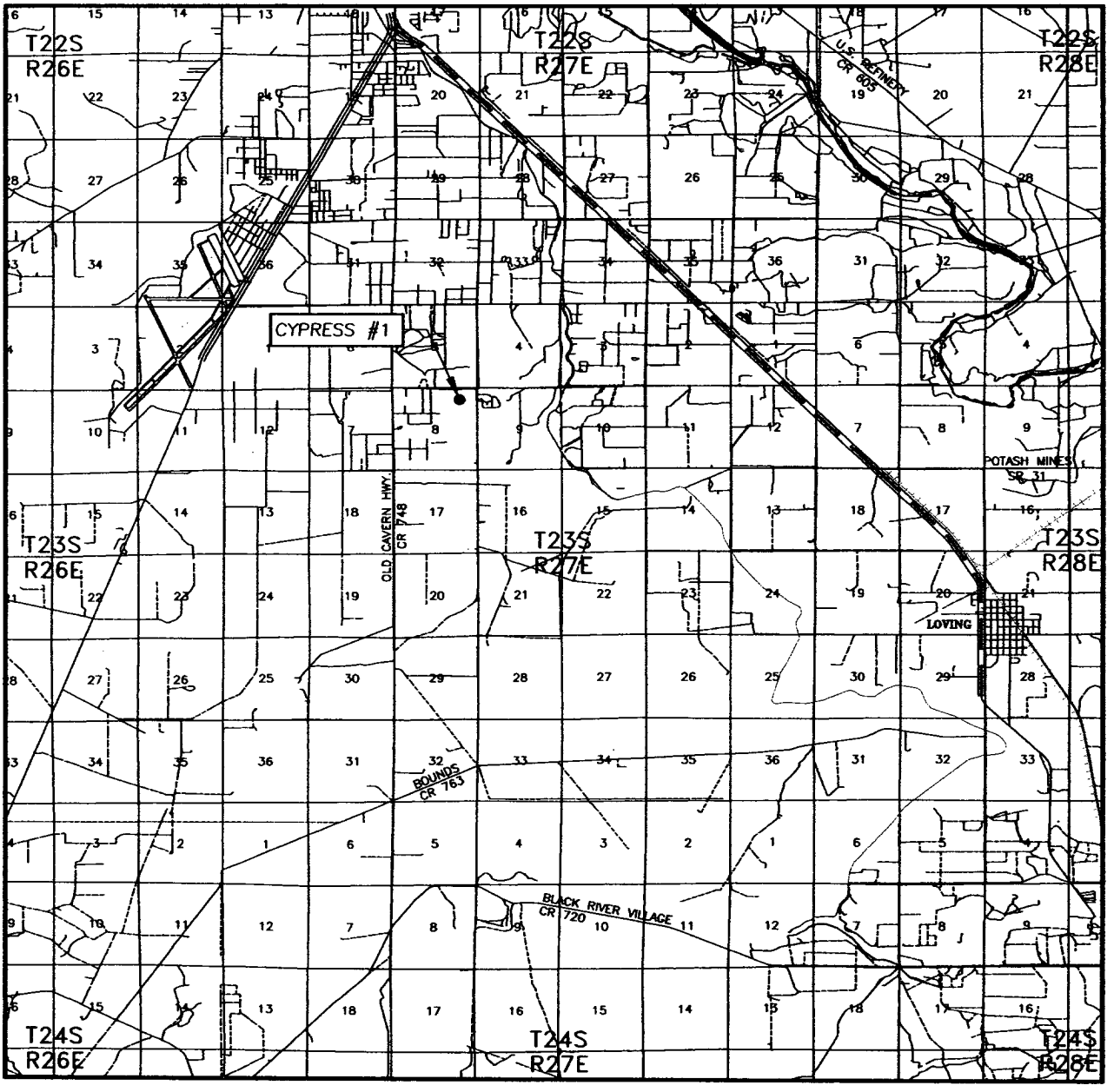
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

PLANTATION OPERATING, LLC

CYPRESS #1 WELL
LOCATED 1280 FEET FROM THE NORTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 8,
TOWNSHIP 23 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 11/09/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.1698	Dr By: J.R.	Rev 1:N/A	
Date: 11/11/05	Disk: CD#5	05111698	Scale:1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 23-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1280' FNL & 1650' FEL

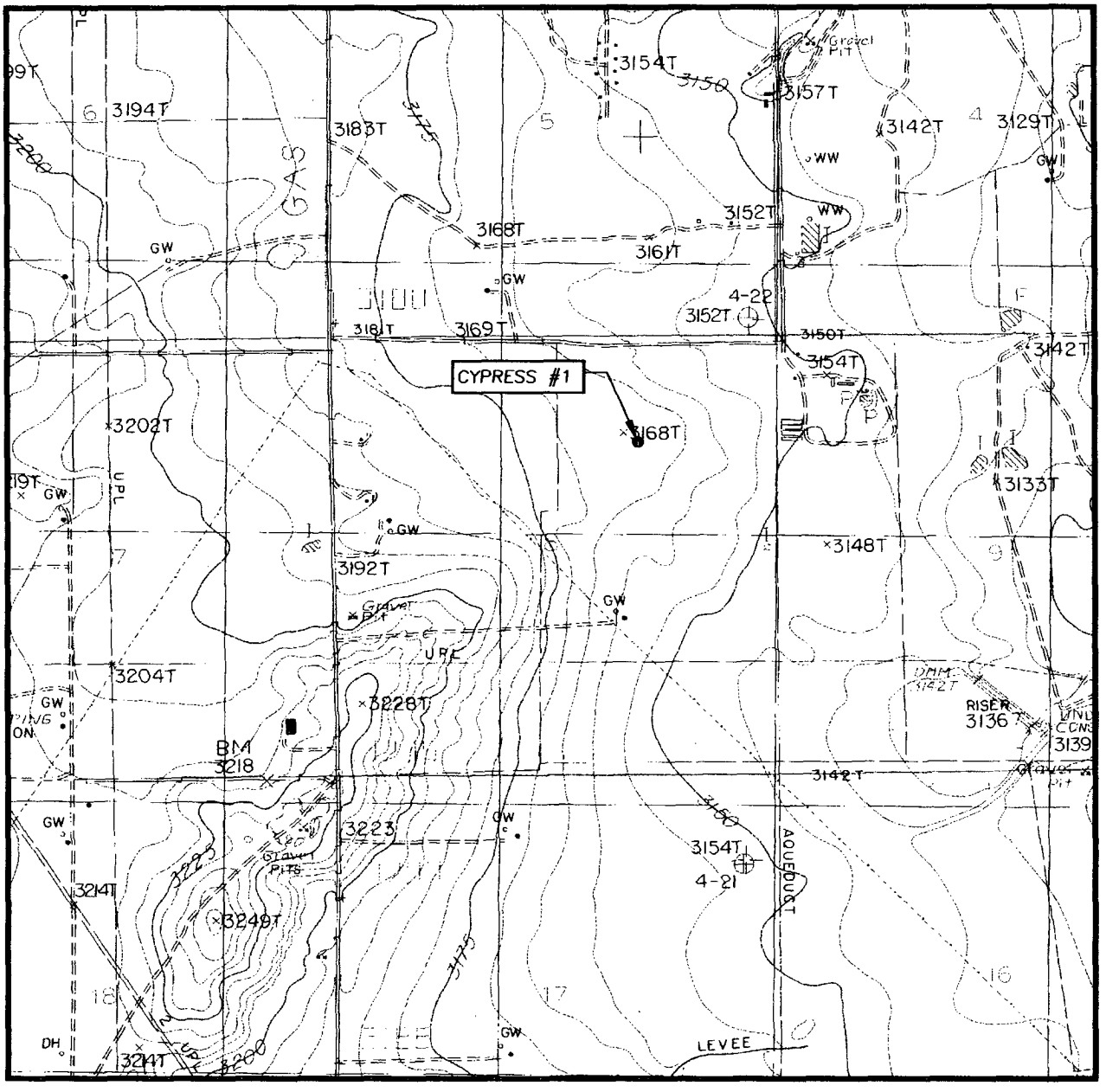
ELEVATION 3171'

OPERATOR PLANTATION OPERATING, LLC

LEASE CYPRESS

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
OTIS, N.M. – 5'

SEC. 8 TWP. 23-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1280' FNL & 1650' FEL

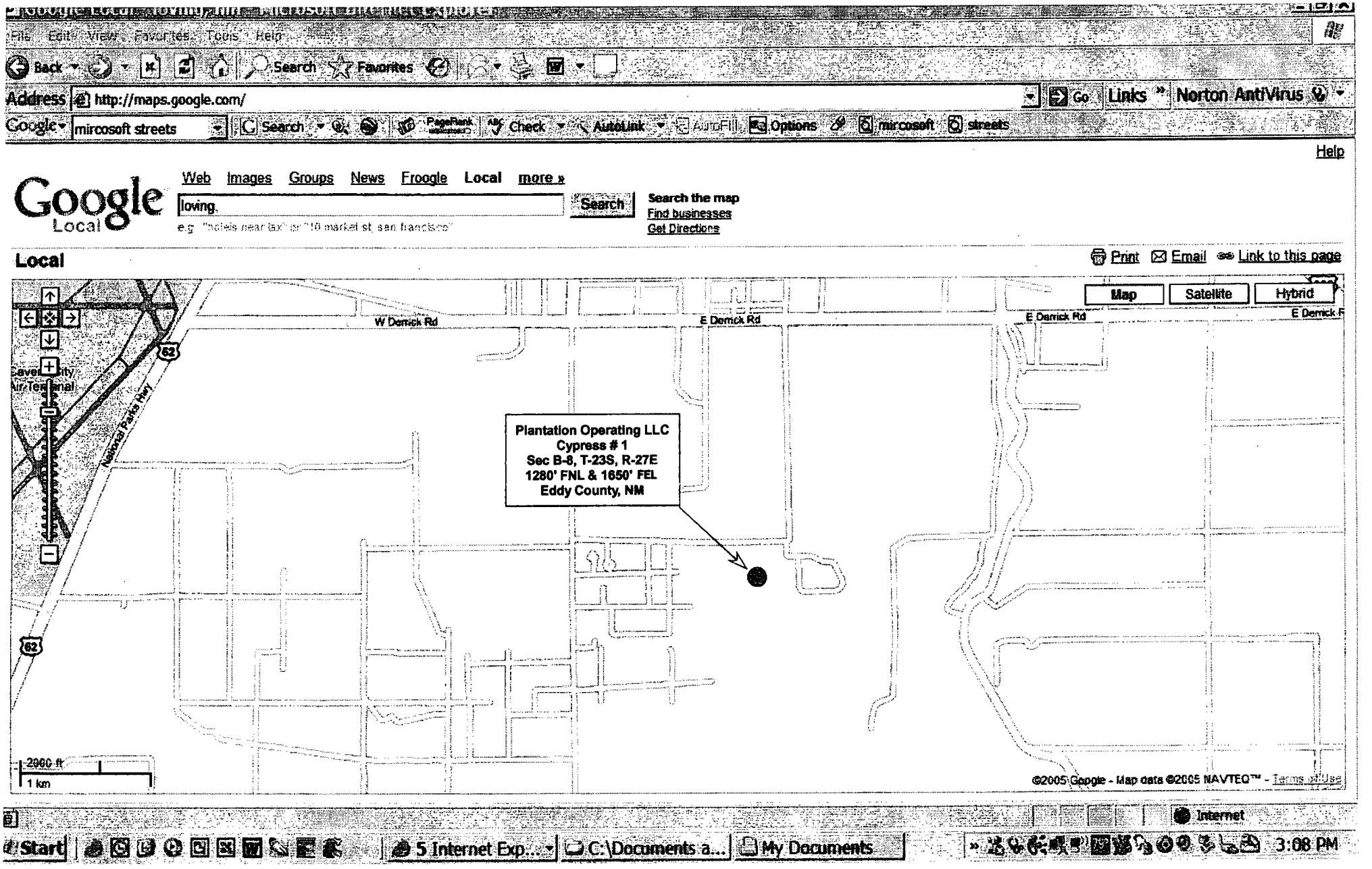
ELEVATION 3171'

OPERATOR PLANTATION OPERATING, LLC

LEASE CYPRESS

U.S.G.S. TOPOGRAPHIC MAP
OTIS, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117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Google Local
Web Images Groups News Froogle Local more »
loving,
Search
Search the map
Find businesses
Get Directions
Local
Print Email Link to this page
Map Satellite Hybrid
W Derrick Rd
E Derrick Rd
Plantation Operating LLC
Cypress # 1
Sec B-8, T-23S, R-27E
1280' FNL & 1650' FEL
Eddy County, NM
62
National Parks Hwy
2000 ft
1 km
©2005 Google - Map data ©2005 NAVTEQ™ - Terms of Use
Internet
Start
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PLANTATION OPERATING, LLC
DRILLING PROGNOSIS

I. WELL IDENTIFICATION

Lease Name: CYPRESS

Well No.: 1

Location: 1280' FNL & 1650' FEL
B - 8, T-23-S, R-27-E

County: Eddy

State: New Mexico

Elevations: GL/KB 3,171' / 3186' (We won't know KB until we know which rig.)

II. DRILLING OBJECTIVE

Zone: Morrow

Total Depth: 12,500'

Pool Name: South Carlsbad (Gas)

Productive Interval: Morrow

III. FORMATION TOPS

ZONE	DRILLING DEPTH(KB)	SUBSEA DEPTH	GROSS INTERVAL DRILLED	PROBABLE FLUID PRODUCTION
KB	-			
Lamar	-	1317	1869	
Bell Canyon	-	1154	2023	Potential BD LCM
Cherry Canyon	-	454	2732	Potential BD LCM
Brushy Canyon	-	-846	4032	Potential BD LCM
Bone Springs	-	-2113	5299	
1st Bone Springs	-	-3150	6336	
2nd Bone Springs	-	-3660	6846	
3rd Bone Springs	-	-5276	8462	
Wolfcamp	-	-5620	8806	GAS (10.5-11.0#/gal)
Atoka	-	-7499	10685	GAS
Strawn	-	-7273	10459	GAS
Morrow	-	-7963	11149	GAS

IV. HOLE SIZE

Hole	Bit Size	T.D.	Gross Interval
Surface	17-1/2"	350'	350'
Intermediate	12-1/4"	2650'	2650'
Production	8-3/4"	12500'	12500'

V. CASING PROGRAM

A. Casing Design

	Casing Size		
String	O.D.	Wt.	Amt.
Surface	13-3/8"	48	350
Intermediate	9 5/8"	40	2650
Production	5-1/2"	17	12,500
	or		
	7"	24	12,500

B. Float Equipment

Surface Casing: 13 3/8-inch Texas Pattern guide shoe and 13 3/8-inch float collar. Wiper plug to displace cement.

Intermediate Casing: 9 5/8-inch Texas Pattern guide shoe and 9 5/8-inch float collar. Wiper plug to displace cement.

Production Casing: 5-1/2-inch super seal float shoe with latch down plug and baffle.

C. Centralizers

Surface Casing: One centralizer at the float collar and five centralizers every other joint thereafter.

Production Casing: Run a total of 18 centralizers. Place one centralizer at the guide-shoe with fifteen (15) centralizers being placed every 80 to 90 feet apart or every other joint in the case of 40-foot joint lengths thereafter. One centralizer inside the bottom of the surface casing and one near surface.

D. Wellhead Equipment

WKM type 9-5/8" x 5-1/2" slip type casinghead with bowl, slips and packoff. Prod 5-1/2" x 2 3/8" male-tubinghead complete with Mandrel, 2 inch outlets, stripper bowl and rubber and slip casing collar.

VI. MUD PROGRAM

A. Drill the surface hole with a fresh water gel spud mud & paper (approximately 8.6 lb./gal) while maintaining a high enough viscosity to adequately clean the hole. Circulate through working pits and sweep for surface casing. Add paper as needed to control excess seepage.

Before drilling below the surface pipe, jet cuttings out of working pit into auxiliary pit and then switch from circulating through the working pit to circulating through the reserve pit with 10 ppg brine.

B. Production Hole

Prior to drilling the cement plug, add ASP-725 through the hopper over 1 to 2 circulations at the rate of 20 gallons per 1000 barrels of fluid. Make certain to mix and agitate ASP 725 prior to adding to brine. ASP-725 is a cationic, liquid polyacrylamide designed to prevent hydration and migration of clays. Due to its cationic nature, bentonite and attapulgite will not hydrate and are useless in this fluid. If additional viscosity is required, use XCD, or Drispac plus.

Since ASP-725 is depleted from the system, some maintenance is required. Recommended maintenance is 5-6 gallons per tour through the mud hopper.

Lime should be used to control pH at 9.0. Paper may be used to control seepage losses.

Water flows while drilling the Delaware (Canyon Group) formations may require deviation from this program.

Depth: 11000. Weight: 9.4 – 9.6. Viscosity: 30-31. Filtrate: 6 or less.

At 9000 begin to lower the fluid loss with starch. **Fluid loss to be 10 cc's or less at 9000.**

Continue to add ASP-725 to the system at the rate of 5-6 gallons per tour. Caustic soda should be used to control pH at 9.0. Use paper and LCM to control seepage losses below 12,100'.

At TD, sweep the hole using a high viscosity 100 barrel pill with Dynasweep and/or XCD or as recommended.

VII. CEMENTING PROGRAM

A. Surface Pipe

Cement surface pipe with approximately 350 sacks (or as required to circulate cement to surface) of API Class-C cement containing 2% Calcium Chloride. Before resuming drilling

operations, allow cement to set for a sufficient time to gain a 500-psi compressive strength (18 hours). Nipple up 3000# 12" Shaffer Type E Double Ram BOP and test rams. Also before drilling the surface cementing plug, the pipe shall be tested to 1000 psi for 15 minutes.

B. Intermediate Pipe

Cement surface pipe with approximately 1250 sacks (or as required to circulate cement to surface) of API Class-C cement containing 2% Calcium Chloride. Before resuming drilling operations, allow cement to set for a sufficient time to gain a 500-psi compressive strength

(18 hours). Nipple up 5000# 12" Shaffer Type E Double Ram BOP and test rams. Also before drilling the surface cementing plug, the pipe shall be tested to 1000 psi for 15 minutes.

C. Production String

Cement the long string with approximately 1400 sacks (or as required) of API Class-C cement containing 3% Halliburton Econolite, 5 lbs/sx Gilsonite and 1/2 lb./sx Floseal mixed to a slurry weight of 11.2 lb./gal followed by 250 sacks of a 50-50 blend of Pozmix "A" and API Class-C cement containing 18% salt, 2% gel, 1/4 lb./gal Floseal and a slurry weight of 14.1 lb./gal. Pump 30 barrels of water ahead of the cement to help remove the mud filter cake.

Once the plug has been bumped and latched, pressure test the casing to 1500 psig.

The total estimated cement volume of 1400 sacks provides for an excess that should be sufficient to the cement the production string. Before the cement job is actually performed, the required cement volume shall be checked against the open hole caliper log to determine the actual amount of cement necessary.

VIII. FORMATION EVALUATION

A. Drilling Rate

1. The drilling rate shall be monitored with a geolograph from the surface to total depth.

2. Plantation Operating, LLC requires that the penetration rate be tabulated in 10 feet increments over the entire hole.

B. Well Cutting Samples

One set of wet cutting samples shall be gathered every ten (10) feet from 350' to total depth. Five-foot (5') samples may be required during the Morrow interval as specified. **Two sets of dried cuttings** cleaned, bagged, tagged, and then grouped into bundles of ten samples per bundle with one bundle representing each 100 feet drilled.

After the cutting samples have been reviewed by the well site geologist, they shall be delivered to the Midland Sample Cut, 704 S. Pecos Street, Midland, Texas.

If required by the well site geologist, a second set of samples shall be gathered over the entire Morrow Formation Section.

C. Mud Logging

On at 2650' prepared to catch samples and monitor gas with instruments calibrated. Logs will be distributed as noted with Electric Logs. **Need two (2) sets of dry samples. Fax field mud logs by segments twice (2) daily to (281) 298-2333.**

D. Drill-Stem Testing

None

E. Coring

None

F. Well Logging

Well Logging information is now available on CD format. This format is to be requested on all work performed. Satellite data up to

Open Hole Logs

Log	Interval	
	2" = 100'	**5" = 100'**
GR-LDL-CNL *	T.D. – 2000'	T.D. – 2000'
Azimuthal Laterolog-GR-MicroCFL	T.D. – 2000'	T.D. – 2000'

*Log and process on both lime and dolomite matrix based on a Platform Express output.

Cased Hole Logs

Log	Interval	
GR-CNL-DSL	T.D. – 2000'	T.D. – 2000'
CBL/VDL-GR-CCL	T.D. – 2000'	T.D. – 2000'

Log Distribution

	No. of Copies				
	Field Prints	Final B/W Prints	Final Color Prints	Field Mud Logs**	Final Mud Logs
Plantation Operating LLC 2203 Timberloch Place # 229 The Woodlands, Texas 77380	5	3	6	3	3
NMOCD District II Office 1301 W. Grand Avenue Artisa, New Mexico 88210	0	1	0	0	0

**** Fax field mud logs by segments twice daily to (281) 298-2333.**

IX. BLOWOUT PREVENTER SYSTEM

Before drilling out from under the surface pipe, the well will be equipped with a 5000-psi 10 inch series 900 double-ram hydraulic blowout preventer. The blowout preventer shall be used through the running of the production string.

X. HAZARDOUS ZONES

Note: Be cautious of water flows while drilling below the Delaware formation. Check for water flows on each connection, during surveys and monitor pit gain/loss. Do not leave drill string on bottom and/or stationary while drilling through the porosity zones in the Delaware & Bone Spring. This is to avoid differential sticking. Be cautious of lost circulation while drilling the Morrow formation at TD. Should circulation cease pump a standby 50 bbl LCM/XCD mix to regain circulation.

XI. AUXILIARY EQUIPMENT

Upper Kelly cock, full opening stabbing valve, rotating head as required.

XII. COMPLETION

Perforations, acid job, and additional stimulation to be determined after completion.

XIII. DURATION OF OPERATIONS

The total elapsed time required for drilling and completing the subject well is expected to be (40+) days.

Distribution
DD
GL
JA

File
Novo Mud
Morco

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
PLANTATION OPERATING, LLC
Cypress #1
1280' FNL & 1650' FEL
Section B-8 - T23S - R27E

This plan is submitted with Form C-101, 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 restoring the surface so that a complete appraisal can be made of the environmental impact associated with the proposed operations.

1. **Existing Roads:**
   - **A.** Exhibit #3 is a topographic map showing the location of the proposed well and access road.
   - **B.** Directions to location: From the intersection of U.S. Hwy #285 (Pecos Hwy) and Co. Rd. #701 (Thomason Rd.) - Go south on Co. Rd. #701 for approximately 3.5 mils to Co. Rd. #757 (Harkness Rd). Go west on Co. Rd. #757 for approximately 0.3 miles. This location is approximately 0.2 miles south.

2. **Proposed Access Road:**
   - **A.** 1100' of new road will be needed. The road will enter location on the SW corner.
   - **B.** The access to the location will be limited to 16' in width and will adequately drain runoff and control erosion as presently constructed.

3. **Location of Nearest Public Dwelling:**
   The distance to the nearest public dwelling from the Cypress #1 is 660'.

4. **Location of Existing and/or Proposed Facilities:**
   - **A.** There are no production facilities on this lease at the present time.
   - **B.** In the event that the well is productive, production facilities will be located on the well pad.

5. **Blowout Preventer:**
   - **A.** Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
   - **B.** Blowout preventer and all fittings must be in good condition with a minimum 5000 psi working pressure.
   - **C.** Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 5000 psi working pressure.

D. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
E. A kelly cock shall be installed on the kelly at all times.
F. Blowout preventer closing equipment to include an accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.

6. Location and Type of Water Supply:
The well will be drilled with a combination of fresh water and brine water based mud systems. The water will be obtained from commercial suppliers in the area and/or hauled to the location by transport trucks over existing and proposed roads as indicated in Exhibit #3.

7. Source of Construction Materials:
All material required for construction of the drill pad and access roads will be obtained from private, state, or federal pits. The construction contractor will be solely responsible for securing construction materials required for this operation and paying any royalties that may be required on those materials.

8. Methods of Handling Waste Disposal:
A. Drill cuttings not retained for evaluation purposed will be disposed of in the reserve pit.
B. Drilling fluids will be allowed to evaporate in the reserve pit prior to closure.
C. Water produced during operations will be disposed of in the reserve pit.
D. If any liquid hydrocarbons are produced during the operations, those liquids will be stored in suitable tanks until sold.
E. Current regulations regarding the proper disposal of human waste will be followed.
F. All trash, junk, and other waste materials will be stored in proper containers to prevent dispersal and will be removed to an appropriate facility within one week of cessation of drilling and completion activities.

9. Ancillary Facilities:
There are no ancillary facilities within the immediate vicinity of the proposed well site.

10. Well Site Layout:
A. A diagram of the drill pad is shown in Exhibit #5. Dimensions of the pad, pits, and location of major rig components are shown.
B. The reserve pit will be lined with a high quality plastic sheeting to prevent migration of fluids as per OCD regulations.

C. The pad dimension of 350' X 300' has been staked and flagged.
D. An archaeological survey has been conducted on the proposed access road and location pad.

11. Plans for Restoration of Surface:

A. Upon cessation of the proposed operations, if the well is abandoned, the location and road will be ripped and re-seeded per guidelines. The reserve pit area, after allowing to dry, will be leveled. The entire location will be restored to the original contour as much as reasonably possible. All trash, garbage, and pit lining will be hauled to appropriate disposal to assure the location is aesthetically pleasing as reasonably possible. All restoration work will be completed within 180 days of cessation of activities.
B. The disturbed area will be restored by re-seeding during the proper growing season.
C. Three sides of the reserve pit will be fenced prior to and during drilling operations. The reserve pit will be fenced on the fourth side after the drilling rig is removed to prevent the endangerment of livestock. The fence will remain in place until the pit area has been leveled and restored.
D. Upon cessation of the proposed operations, if the well is not abandoned, the reserve pit area will be restored as per OCD guidelines. Any additional caliche required for production facilities will be obtained from a source as described in Section 6.

12. Contingency Plan:

Attached is our contingency plan.

13. Surface Ownership:

The surface is owned by:

Warren and Sheryl M. Picken, Trustees
1526 Tokay Avenue
Carlsbad, NM 88220
(505) 302-3481

George P. Reddy (Est. of Inda Rhea Reddy)
3408 Dow Drive
Roswell, NM 88201
(505) 623-6233 (wk)
(505) 623-3767 (h)

14. Other Information:

The primary use of the surface at the location is for grazing of livestock.

15. Operator's Representative:

Through APD approval, drilling operations, completion and production operations:

Donald P. Dotson
COO
Plantation Operating, LLC
2203 Timberloch Place, Suite 229
The Woodlands, TX 77380
281-296-7222

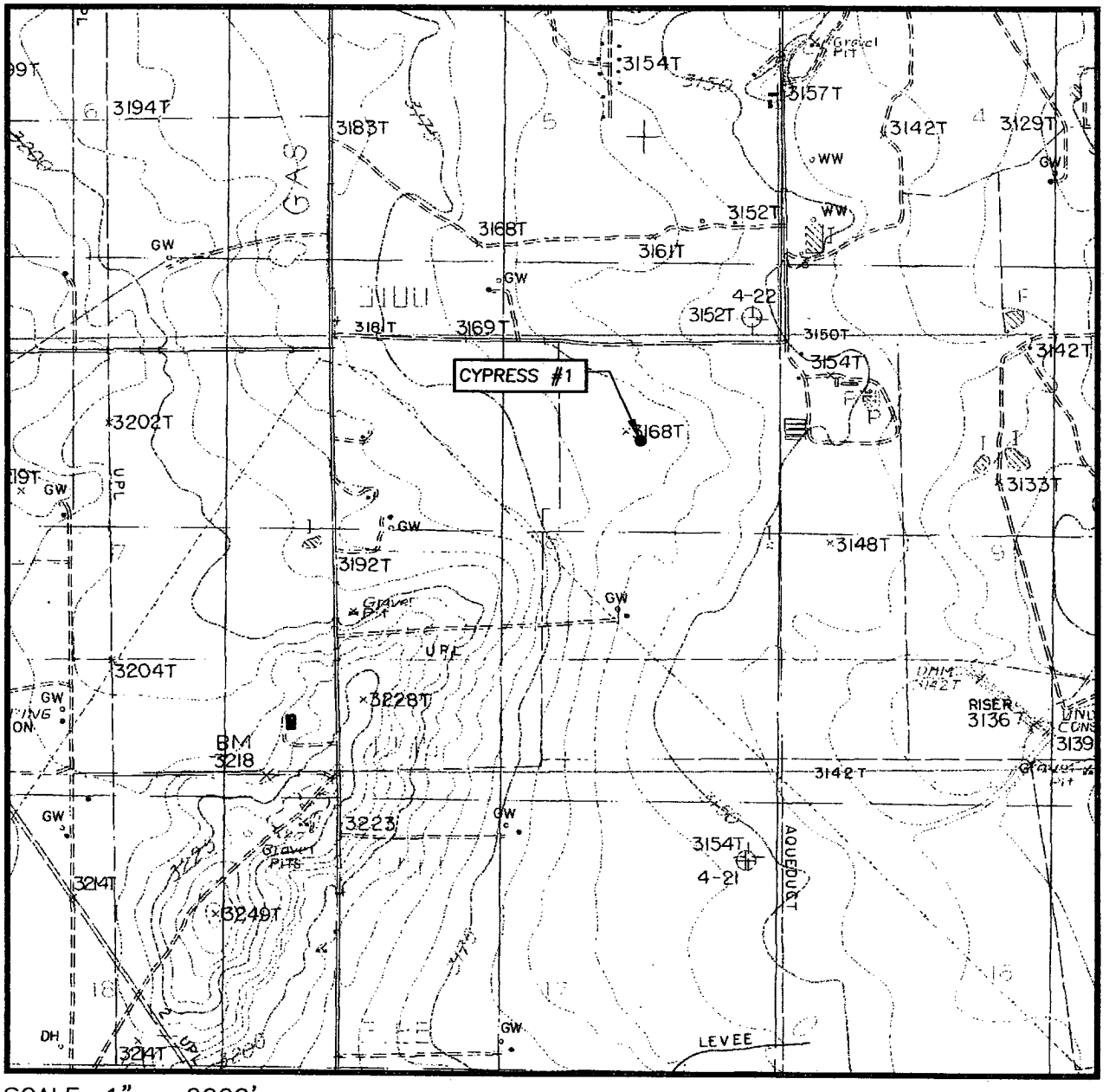
16. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Plantation Operating, LLC, its contractors and subcontractors, in accordance with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: March 15, 2006 Signature: 

Donald P. Dotson
Plantation Operating, LLC
2203 Timberloch Place, Suite 229
The Woodlands, TX 77380
281-296-7222

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
OTIS, N.M. – 5'

SEC. 8 TWP. 23-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1280' FNL & 1650' FEL

ELEVATION 3171'

OPERATOR PLANTATION OPERATING, LLC

LEASE CYPRESS

U.S.G.S. TOPOGRAPHIC MAP
OTIS, N.M.

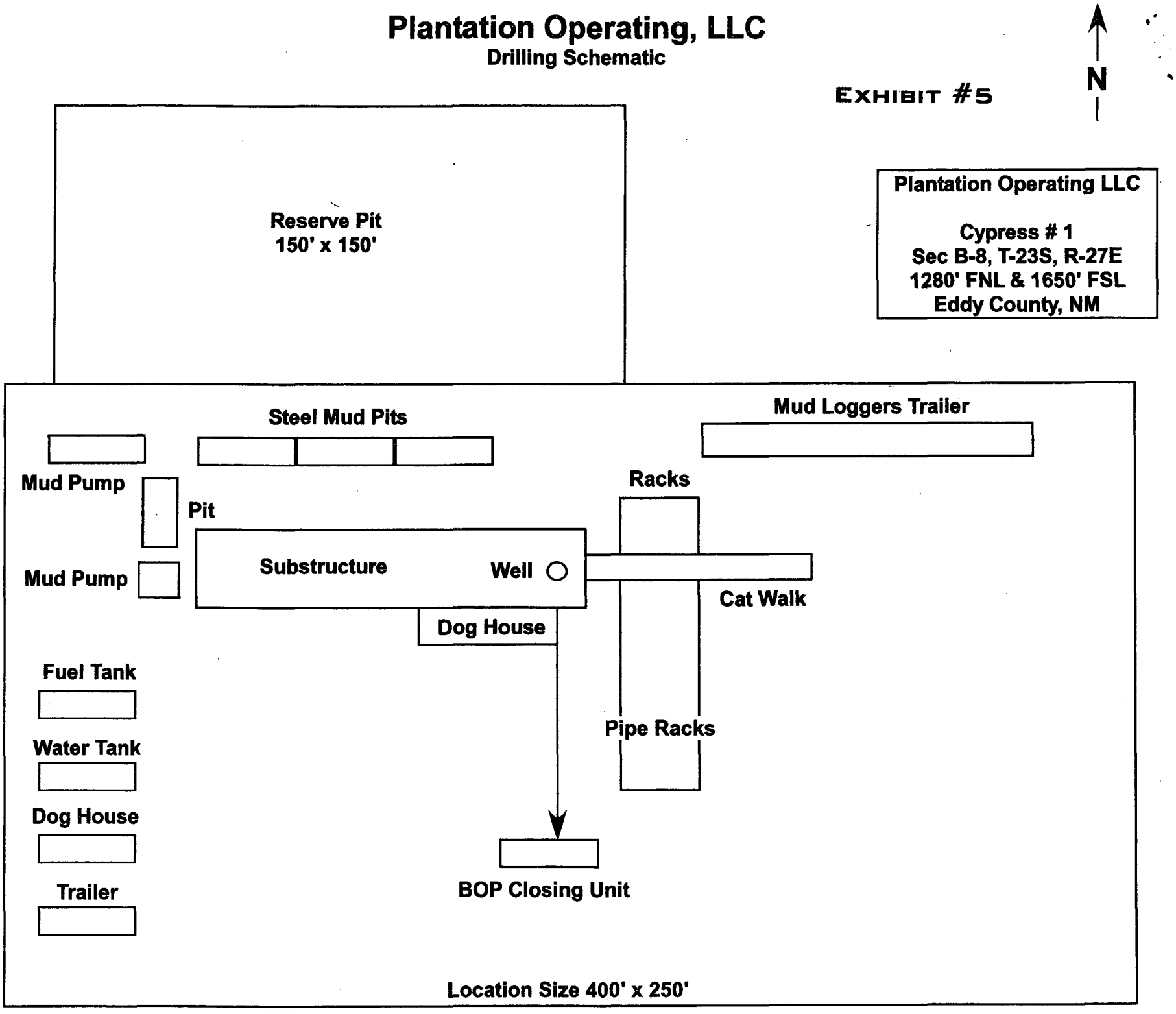
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT #3

Plantation Operating, LLC

Drilling Schematic

EXHIBIT #5



PLANTATION OPERATING, LLC

"CONTINGENCY PLAN"

Table of Contents

I. H2S Contingency Plan Section

Scope

This contingency plan establishes guidelines for all company employees and contract employees whose work activities may involve exposure to Hydrogen Sulfide Gas (H2S).

Objective

1. Prevent any and all accidents and prevent the uncontrolled release of H2S into the atmosphere.
2. Provide proper evacuation procedures to cope with emergencies.
3. Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan

Implementation: This plan, with all details, is to be fully implemented before drilling below 1000'.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to prior to drilling below 1000'.

Emergency Call Lists: Included are the telephone numbers of all persons that would need to be contacted should an emergency occur.

Briefing: This section deals with the briefing of all people involved in the drilling operation.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

Check Lists: Status Check Lists and Procedural Check Lists have been included to insure adherence to the plan.

General Information: A general information section has been included to supply support information.

II. Emergency Procedures Section

Emergency Procedures

I. In the event of any evidence of H2S level above 10 ppm, take the following steps immediately:
   A. Secure breathing apparatus.
   B. Order non-essential personnel out of the danger zone.
   C. Take steps to determine if the H2S level can be corrected or suppressed, and if so, proceed with normal operations.

II. If uncontrollable conditions occur, proceed with the following:
   A. Take steps to protect and/or remove any public downwind of the rig including partial evacuation or isolation. Notify necessary Public Safety personnel and Plantation Operating, Drilling Superintendent of the situation.
   B. Remove all personnel to the Safe Briefing Area.
   C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.
   D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety procedures.

III. Responsibility
   A. The Company Approved Supervisor shall be responsible for the total implementation of the plan.
   B. The Company Approved Supervisor shall be in complete command during any emergency.
   C. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

A. Emergency Procedure Implementation

I. Drilling or Tripping
- A. All Personnel
  1. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.
  2. Check status of other personnel (Buddy System).
  3. Secure breathing apparatus.
  4. Await order from Supervisor.
- B. Drilling Foreman
  1. Report to the upwind Safe Briefing Area.
  2. Don breathing apparatus and return to the point of release with the Tool Pusher or Driller (Buddy System).
  3. Determine the concentration of H2S.
  4. Assess the situation and take appropriate control measures.
- C. Tool Pusher
  1. Report to the upwind Safe Briefing Area.
  2. Don breathing apparatus and return to the point of release with the Drilling Foreman or Driller (Buddy System).
  3. Determine the concentration of H2S.
  4. Assess the situation and take appropriate control measures.
- D. Driller
  1. Don escape unit.
  2. Check monitor for point of release.
  3. Report to the Safe Briefing Area.
  4. Check the status of other personnel (in a rescue attempt, always use the Buddy System).
  5. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.
  6. Assume the responsibility of the Drilling Foreman and Tool Pusher until they arrive, in the event of their absence.
- E. Derrick Man
  1. Remain in the Safe Briefing Area until otherwise instructed by Supervisor.
- F. Mud Engineer
  1. Report to Safe Briefing Area.
  2. When instructed, begin check of mud for pH level and H2S level.
- G. Safety Personnel
  1. Don appropriate breathing apparatus.
  2. Check status of all personnel.
  3. Await instructions from Drilling Foreman

II. Taking a Kick
- A. All personnel report to Safe Briefing Area.
- B. Follow standard BOP procedures.

III. Open Hole Logging
   A. All unnecessary personnel should leave the rig floor.
   B. Drilling Foreman and Safety personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging
   A. Follow "Drilling or Tripping" procedures.
   B. Assure that all personnel have access to protective equipment.

C. Simulated Blowout Control Drills

All drills will be initiated by activating alarm devices (air horn). One long blast, on air horn, for Actual and Simulated Blowout Control Drills. The Drilling Foreman or Tool Pusher will perform this operation at least one time per week for each of the following conditions, with each crew:

Drill 1 Bottom Drilling

Drill 2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.: _____

Reaction time to shut-in: _____ minutes, _____ seconds.

Total time to complete assignment: _____minutes, _____seconds.

I. Drill Overviews
   A. Drill No. 1 – Bottom Drilling
      1. Sound the alarm immediately.
      2. Stop the rotary and hoist the kelly joint above the rotary table.
      3. Stop the circulatory pump.
      4. Close drill pipe rams.
      5. Record casing and drill pipe shut-in pressures and pit volume increases.
   B. Drill No. 2 – Tripping Drill Pipe
      1. Sound the alarm immediately.
      2. Position the upper tool joint just above the rotary table and set slips.
      3. Install a full opening valve or inside blowout preventer tool in order to close the drill pipe.
      4. Close the drill pipe rams.
      5. Record the shut-in annular pressure.

II. Crew Assignments
   A. Drill No. 1 – Bottom Drilling
      1. Driller
         a. Stop the rotary and hoist kelly joint above the rotary table.
         b. Stop the circulatory pump.
         c. Check flow.
         d. If flowing, sound the alarm immediately.
         e. Record the shut-in drill pipe pressure.

f. Record all data reported by the crew.
g. Determine the mud weight increase needed or other courses of action.

2. Derrickman
   a. Open choke line valve at BOP
   b. Signal Floor Man #1 at accumulator, that choke line is open.
   c. Close choke and upstream valve after pipe tams have been closed.
   d. Read the shut-in annular pressure and report readings to Driller.
3. Floor Man #1
   a. Close the pipe tams after receiving the signal from the Derrickman.
   b. Report to Driller for further instructions.
4. Floor Man #2
   a. Notify the Tool Pusher and Operator Representative of the H2S alarms.
   b. Check for open fires and if safe to do so, extinguish them.
   c. Stop all welding operations.
   d. Turn off all non-explosion proof lights and instruments.
   e. Report to Driller for further instructions.
5. Tool Pusher
   a. Report to the rig floor.
   b. Have a meeting with all crews.
   c. Compile and summarize all information.
   d. Calculate the proper kill weight.
   e. Ensure that proper well procedures are put into action.
6. Operator Representative
   a. Notify the Drilling Superintendent.
   b. Determine if an emergency exists, and if so, activate the contingency plan.

B. Drill No. 2 – Tripping Pipe

1. Driller
   a. Sound the alarm immediately when mud volume increase has been detected.
   b. Position the upper tool joint just above the rotary table and set slips.
   c. Install a full opening valve or inside blowout preventer tool to close the drill pipe.
   d. Check flow.
   e. Record all data reported by the crew.
   f. Determine the course of action.
2. Derrickman
   a. Come down out of derrick.
   b. Notify Tool Pusher and Operator Representative.

c. Check for open fires and, if safe to do so, extinguish them.
d. Stop all welding operations.
e. Report to Driller for further instructions.

3. Floor Man #1
   a. Pick up full opening valve or inside blowout preventors and stab into tool joint above rotary table (with Floor Man #2).
   b. Tighten valve with back-up tongs.
   c. Close pipe rams after signal from Floor Man #2.
   d. Read accumulator pressure and check for possible high-pressure fluid leaks in valves or piping.
   e. Report to Driller for further instructions.
4. Floor Man #2
   a. Pick-up full opening valve or inside blowout preventors and stab into tool joint above rotary table (with Floor Man #1).
   b. Position back-up tongs on drill pipe.
   c. Open choke line valve at BOP.
   d. Signal Floor Man #1, at accumulator, that choke line is open.
   e. Close choke and upstream valve after pipe rams have been closed.
   f. Check for leaks on BOP stack and choke manifold.
   g. Read annular pressure.
   h. Report readings to the Driller.
5. Tool Pusher
   a. Report to rig floor.
   b. Have a meeting with all crews.
   c. Compile and summarize all information.
   d. Calculate proper kill weight.
   e. See that proper well kill procedures are put into action.
6. Operator Representative
   a. Notify Drilling Superintendent.
   b. Determine if an emergency exists, and if so, activate the contingency plans.

III. Ignition Procedures Section

A. Responsibility

The decision to ignite the well is the responsibility of the **DRILLING FOREMAN** in concurrence with the **STATE POLICE**. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the **RIG TOOL PUSHER**. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.
2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

B. Instructions for Igniting the Well

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and attach a safety rope. One man must monitor the atmosphere for explosive gases with the Explosimeter, while the Drilling Foreman is responsible for igniting the well.
2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
3. Ignite from upwind and do not approach any closer than is warranted.
4. Select the ignition site best suited for protection and which offers an easy escape route.
5. Before igniting, check for the presence of combustible gases.
6. After igniting, continue emergency actions and procedures as before.
7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

IV. Training Program Section

A. Training Requirements

When working in an area where Hydrogen Sulfide gas (H2S) might be encountered, definite training requirements must be carried out. The Company Supervisor will insure that all personnel, at the wellsite, have had adequate training in the following:

1. Hazards and characteristics of H2S.
2. Physical effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H2S detection.
5. Emergency rescue.
6. Resuscitators.
7. First aid and artificial resuscitation.
8. The effects of H2S on metals.
9. Location Safety.

Service company personnel and visiting personnel must be notified in the zone contains H2S. Each service company must provide adequate training and equipment for their employees before they arrive at the well site.

V. Emergency Equipment Section

A. Emergency Equipment Requirements

I. Signs
   A. Located at the location entrance with the following information:

CAUTION – POTENTIAL POISON GAS
HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION

II. *Fresh Air Breathing Equipment
   A. Air line units for all rig personnel on location.
   B. Cascade system with hose lines to rig floor and one to the derrickman and other operation areas. Spare cascade (trailer) on location.

III. Wind Socks or Wind Streamers
   A. Two 10" windsocks located at strategic locations at a height visible from the rig floor.
   B. Wind streamers (if preferred) to be placed at various locations on the wellsite to insure wind consciousness at all times. (Corners of location).

IV. Hydrogen Sulfide Detector and Alarms
   A. 1 – Four channel H2S monitor with alarms.
   B. 4 – Sensors, located at floor, bell nipple, shale shaker and pits.
   C. *Hand operated detectors with tubes.
   D. *H2S monitor tester.

V. Condition Sign and Flags
   A. One each of green, yellow and red condition flags to be displayed to denote conditions:

GREEN	**Normal Conditions**
YELLOW	**Potential Danger**
RED	**Danger, H2S Present**

   B. The condition flag shall be posted at the location entrance.

VI. *Auxiliary Rescue Equipment
   A. Stretcher
   B. Two 100' lengths of 5/8" nylon rope.

VII. *Mud Inspection Devices
   A. Garrett Gas Train or Hach Tester for inspection of Hydrogen Sulfide concentration in the mud system.

VIII. Fire Extinguishers
   A. Adequate fire extinguishers shall be located at strategic locations.

IX. Blowout Prevention Equipment
   A. The well shall have hydraulic BOP equipment for the anticipated BHP.
   B. Equipment must be tested upon installation.

X. *Combustible Gas Detectors
   A. There shall be one combustible gas detector on location at all times.
XI. BOP Testing
   A. BOP, Choke Line and Kill Line will be tested as specified by operator.
XII. Audio System
   A. Radio/cellular communications shall be available at the rig.
   B. Radio/cellular communications shall be available at the rig floor or trailer.
   C. Radio/cellular communications shall be available on vehicles.
XIII. Special Control Equipment
   A. Hydraulic BP equipment with remote control on ground.
   B. Rotating head at surface casing point.
XIV. Evacuation Plan
   A. Evacuation routes should be established prior to spudding each well.
   B. Should be discussed with all rig personnel.
XV. Designated Areas
   A. Parking and visitor area.
      1. All vehicles are to be parked at a pre-determined safe distance from the wellhead.
      2. Designated smoking area.
   B. Safe Briefing Area
      1. Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
      2. Personal protective equipment should be stored in both protection centers or if a moveable trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both protection centers should be accessible.

- *Additional equipment will be available at Callaway Safety Equipment Co., Inc., (505) 392-2973, 3229 Industrial, Hobbs, New Mexico, 88240.
- Additional personal Hydrogen Sulfide monitors on location for all hands.
- Automatic Flare igniter installed on rig.

VI. Check List Section

A. Status Check List

NOTE: Date each item as they are implemented.

1. Sign at location entrance _____
2. Two (2) windsocks (in required locations) _____
3. Wind streamers (if required) _____
4. 30 minute pressure demand air packs on location for all rig personnel and mud loggers. _____
5. Air packs, inspected and ready for use. _____
6. Spare bottles for each air pack (if required) _____
7. Cascade system and hose line hook up _____
8. Cascade system for refilling air bottles _____
9. Choke manifold hooked up and tested (Before drilling out surface casing) _____
10. Remote Hydraulic BOP control (hooked up and tested before drilling out surface casing) _____
11. BOP Preventor tested (before drilling out surface casing) _____
12. Mud engineer on location with equipment to test mud for Hydrogen Sulfide _____
13. Safe Briefing Areas set up _____
14. Condition sign and flags on location and ready _____
15. Hydrogen Sulfide detection system hooked up _____
16. Hydrogen Sulfide alarm system hooked up _____
17. Stretcher on location at Safe Briefing Area _____
18. 1 – 100' length of 5/8" nylon rope on location _____

19. 1 – 20# or 30# ABC fire extinguisher in safety trailer in addition to those on rig _____

20. Combustible gas detector on location and tested _____

21. All rig crews and supervisors trained (as required) _____

22. Access restricted for unauthorized personnel _____

23. Drills on H2S and well control procedures _____

24. All outside service contractors advised of potential Hydrogen Sulfide on well _____

25. **NO SMOKING** sign posted _____

26. Hand operated H2S detector with tubes on location _____

27. 25 mm flare gun with flares _____

28. Automatic Flare igniter installed on rig _____

B. Procedural Check List

Perform the following on each tour:

1. Check fire extinguishers to see that they have the proper charge.
2. Check breathing equipment to insure that it has not been tampered with.
3. Check pressure on supply air bottles to see that they are capable of recharging.
4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that the demand regulator is working. This requires that the bottle be opened and the mask assembly be put on tight enough so that when you inhale, you get air.
2. Blowout preventor skills.
3. Check supply pressure on BOP accumulator stand-by source.
4. Check all work/escape units for operation: demand regulator, escape bottle air volumes, supply bottle air volume.
5. Check breathing equipment mask assembly to see that straps are loosened and turned back.
6. Check pressure on breathing equipment air bottles to make sure they are charged to full volume.
7. Check breathing equipment air bottles to make sure all demand regulators are working. This requires that the bottles be opened and the mask assembly be put on tight enough so that when you inhale, you get air.
8. Confirm pressure on all supply air bottles.
9. Perform breathing equipment drills with on-site personnel.
10. Test the Explosimeter to verify batteries are good.

Check the following supplies for availability:

1. Stretcher
2. Safety belts and ropes
3. Emergency telephone lists
4. Spare air bottle
5. Spare oxygen bottles (if resuscitator required)
6. Hand operated H2S detectors and tubes

VII. Briefing Procedure Section

A. Briefing Procedures

The following scheduled briefings will be held to insure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well

Attendance:
Drilling Supervisor
Drilling Engineer
Drilling Foreman
Rig Pushers
Rig Driller
Mud Engineer
All Safety Personnel
Service Companies

Purpose: Review and discuss the well program, step by step, to insure complete understanding of assignments and responsibilities.

VIII. Evacuation Plan Section

A. General Plan

The direct lines of action prepared by CALLAWAY SAFETY EQUIPMENT CO., INC. to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foreman, Tool Pusher, Driller) determine Hydrogen Sulfide gas cannot be limited to the well location and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area map.
2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation needs to be implemented.
3. Company approved safety personnel that have been trained in the use of Hydrogen Sulfide detection equipment and self-contained breathing equipment will be utilized.
4. Law Enforcement personnel (State Police, Sheriff's Department, local Police Department and local Fire Department) will be called to aid in setting up and maintaining roadblocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

See Emergency Reaction Plan

B. Emergency Assistance Telephone List

Public Safety

Carlsbad P.D.	(505) 885-2111 or 911
Eddy County Sheriff's Department	(505) 746-9888 or 911
New Mexico State Police	(505) 622-7200 or 911
Fire Department (Artesia)	(505) 746-5050 or 911
New Mexico, OCD (Tim Gum)	(505) 748-1283
New Mexico, D.O.T.	(505) 827-5100
Bureau of Land Management	(505) 393-3612
U.S. Dept. of Labor	(505) 248-5302
State Emergency Operation Center	(505) 476-9635

Plantation Operating, LLC

Main Office Number	(281) 296-7222
Don Dotson (COO)	(281) 796-1645
John Allred	(281) 389-8832
Sean Keenan	(713) 504-3998

Safety Contractor

Callaway Safety Equipment	Hobbs	(505) 393-2973
	Odessa	(915) 561-5049

C. Affected Public Notification List
(within a 65' radius of exposure @ 100 ppm)

The geologic zones that will be encountered during drilling are known to contain hazardous quantities of H2S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a had delivered written notice describing the activities, potential hazards, conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

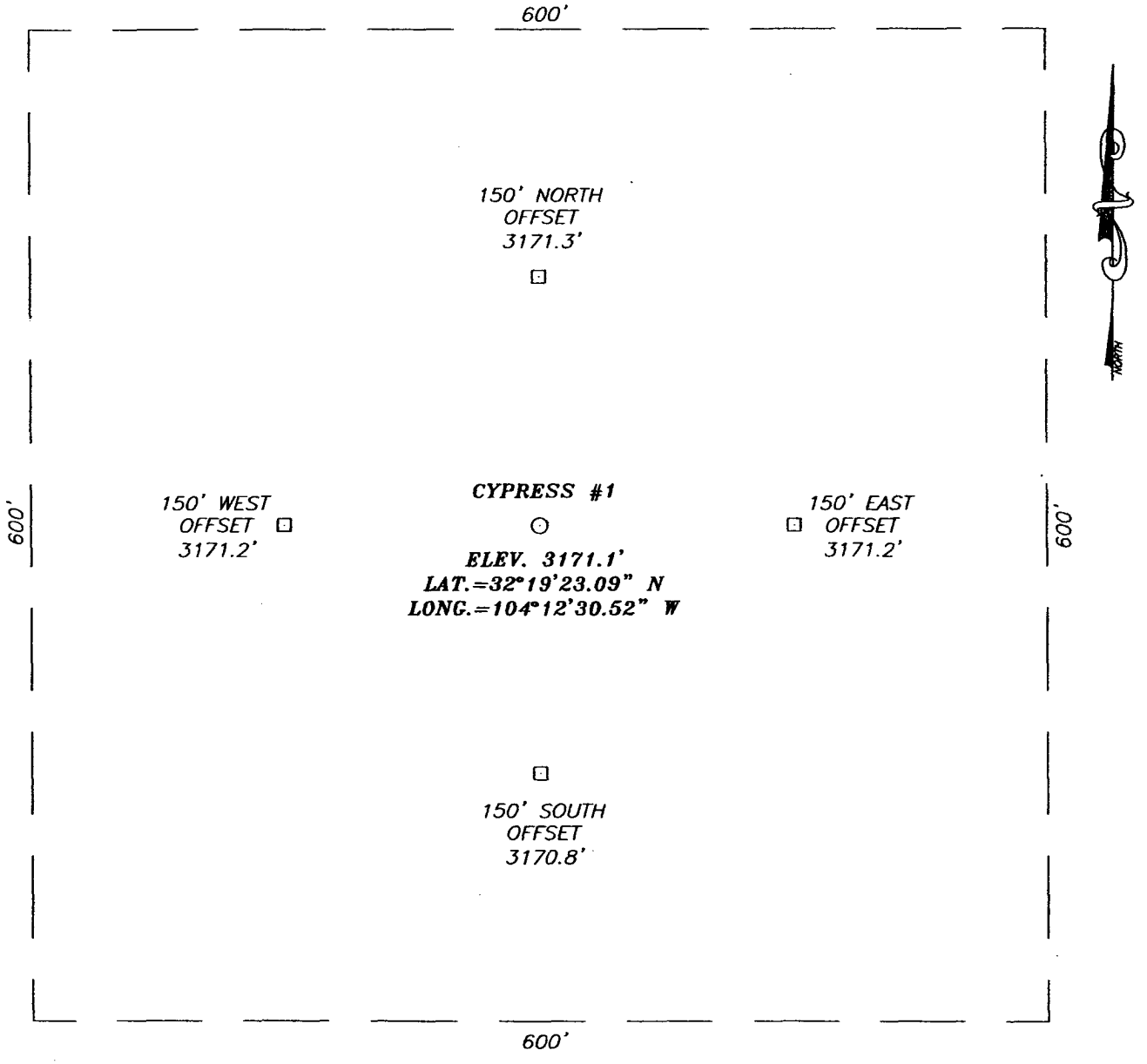
Evacuee Description:	Residents
Notification Process:	A continuous siren audible to all residents will be activated, signaling evacuation of previously notified and informed residents.
Evacuation Plan:	All evacuees will migrate lateral to the wind direction.

The Oil Company will identify all homebound or highly susceptible individuals and make special evacuation preparations, interfacing with the local fire and emergency medical services as necessary.

IX. Maps and Plats Section

SECTION 8, TOWNSHIP 23 SOUTH, RANGE 27 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #285 (PECOS HWY.) AND CO. RD. #701 (THOMASON RD.) GO SOUTH ON CO. RD. #701 FOR APPROX. 3.5 MILES TO CO. RD. #757 (HARKNESS RD.) GO WEST ON CO. RD. #757 FOR APPROX. 0.3 MILES. THIS LOCATION IS APPROX. 0.2 MILES SOUTH.

100 0 100 200 Feet

Scale:1"=100'

PROVIDING SURVEYING SERVICES SINCE 1948

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

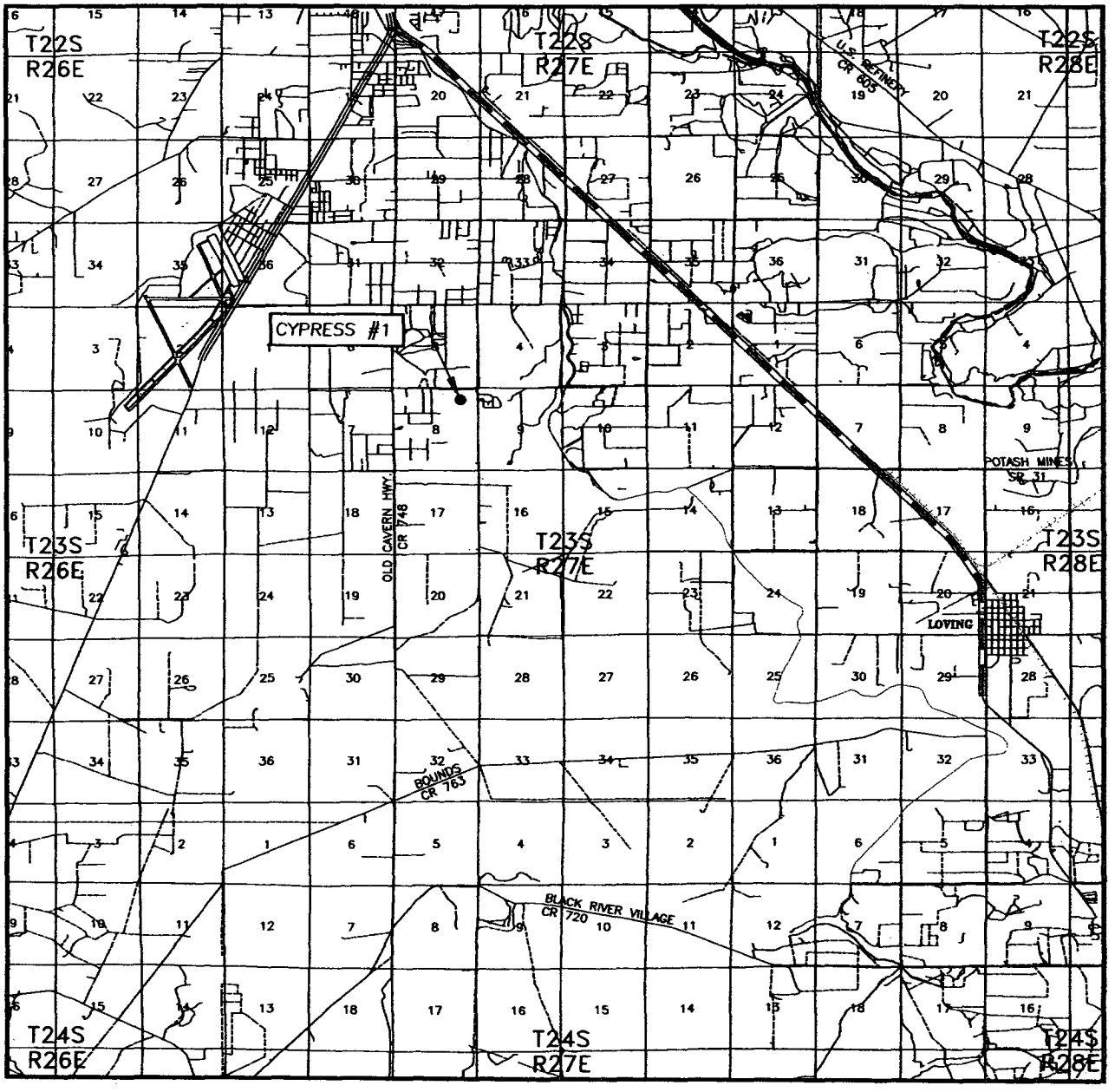
(505) 393-3117

PLANTATION OPERATING, LLC

CYPRESS #1 WELL
LOCATED 1280 FEET FROM THE NORTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 8,
TOWNSHIP 23 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 11/09/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.1698	Dr By: J.R.	Rev 1:N/A	
Date: 11/11/05	Disk: CD#5	05111698	Scale:1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 23-S RGE. 27-E

SURVEY N.M.P.M.

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DESCRIPTION 1280' FNL & 1650' FEL

ELEVATION 3171'

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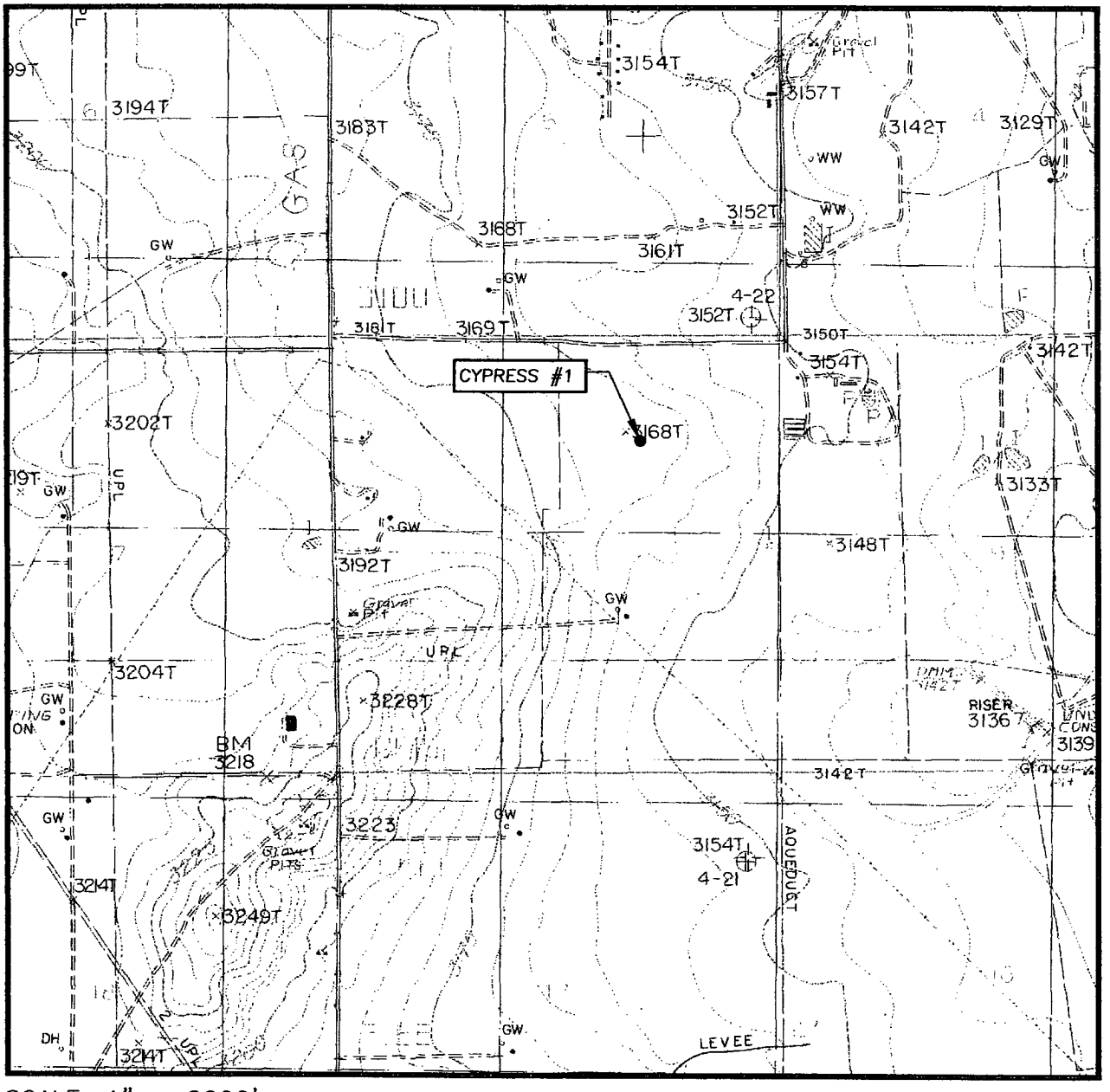

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X. General Information Section

D. Toxic Effects of Hydrogen Sulfide Poisoning

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 20 ppm, which is .002% by volume. Hydrogen Sulfide is heavier than air (specific gravity – 1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume. Hydrogen Sulfide is almost as toxic as Hydrogen Cyanide and is between five and six times more toxic than Carbon Monoxide. Toxicity data for Hydrogen Sulfide and various other gases are compared below in Table I. Physical effects at various Hydrogen Sulfide levels are shown in Table II.

Table I
Toxicity of Various Gases

Common Name	Chemical Formula	Specific Gravity	Threshold Limit (A)	Hazardous Limit (B)	Lethal Concentration (C)
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H2S	1.18	10 ppm (D) 20 ppm (E)	250 ppm/hr	600 ppm
Sulfur Dioxide	SO2	2.21	5 ppm		1000 ppm
Chlorine	CL2	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO2	1.52	5000 ppm	(5%)	(10%)
Methane	CH4	0.55	90,000 ppm	(9%)	Combustible Above 5% in air

A. **Threshold Limit** – Concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.
B. **Hazardous Limit** - Concentration that may cause death.
C. **Lethal Concentration** – Concentration that will cause death with short-term exposure.
D. **Threshold Limit (10 ppm)** – 1972 ACGIH (American Conference of Governmental Industrial Hygienists).

E. Threshold Limit (20 ppm) – 1966 ANSI acceptable ceiling concentration for eight-hour exposure (based on 40 hour week) is 20 ppm. OSHA Rules and Regulations (Federal Register, Volume 37, No. 202, Part II, dated 10/18/72).

Table II

Physical Effects of Hydrogen Sulfide

Percent (%)	ppm	Physical Effects
0.001	10	Obvious and unpleasant odor
0.002	20	Safe for 8 hrs. exposure
0.01	100	Kills smell in 3-5 minutes; may sting eyes & throat
0.02	200	Kills smell shortly; stings eyes and throat
0.03	300	IDLH (Immediate Danger to Life and Health) Level
0.05	500	Dizziness; breathing ceases in a few minutes
0.07	700	Unconscious quickly; death will result if not rescued
0.10	1000	Unconscious at once; followed by death within minutes

***CAUTION: Hydrogen Sulfide is a colorless and transparent gas and is highly flammable. It is heavier than air and may accumulate in low places.**

E. Use of Self-Contained Breathing Apparatus (SCBA)

I. Written procedures shall be prepared covering safe use of respirators in dangerous atmospheric situations, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.

II. Respirators shall be inspected frequently, at random, to insure that they are properly used, cleaned and maintained.

III. Anyone who may use respirators shall be trained in how to properly seal the face piece. They shall wear respirators in normal air and then in a test atmosphere. **(NOTE: Such items as facial hair (beard or sideburns) and eyeglass temple pieces will not allow a proper seal).** Anyone that may be expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses. Contact lenses should not be allowed.

IV. Maintenance and care of Respirators

A. A program of maintenance and care of respirators shall include the following:
   1. Inspection for defects, including leak checks.
   2. Cleaning and disinfecting.
   3. Repair
   4. Storage

B. Inspection: Self Contained Breathing Apparatus (SCBA) for emergency use shall be inspected monthly and records maintained for the following:
   1. Fully charged cylinders.
   2. Regulator and warning device operation.
   3. Condition of face piece and connection.
   4. Elastomer or rubber parts shall be stretched or massaged to keep them pliable and prevent deterioration.

C. Routinely used respirators shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection is provided.

V. Persons assigned tasks that require the use of Self Contained Breathing Equipment shall be certified physically fit for breathing equipment usage by the local company physician at least annually.

VI. Respirators should be worn during the following conditions:

A. Any employee who works near the top or on the top of any tank unless tests reveal less than 20 ppm of H2S.

B. When breaking out any line where H2S can reasonably be expected.

C. When sampling air in areas to determine if toxic concentrations of H2S exist.

D. When working in areas where over 20 ppm H2S has been detected.

E. At any time there is a doubt as to the H2S level in the area to be entered.

F. Rescue-First Aid for Hydrogen Sulfide Poisoning

DO NOT PANIC ! ! ! ! !

Remain Calm -- THINK

1. Hold your breath (Do not inhale; stop breathing) and go to Briefing Area.
2. Put on Breathing apparatus.
3. Remove victim(s) to fresh air as quickly as possible. (Go upwind from the source or at right angles to the wind; **NOT** downwind).
4. Briefly apply chest pressure-arm lift method of artificial respiration to clear the victim's lungs and to avoid inhaling any toxic gas directly from the victim's lungs.
5. Provide for prompt transportation to the hospital and continue giving artificial respiration if needed.
6. Hospital(s) or medical facilities need to be informed, beforehand, of the possibility of H2S gas poisoning, no matter how remote the possibility.
7. Notify emergency room personnel that the victim(s) have been exposed to H2S gas.

Besides basic first aid, everyone on location should have a good working knowledge of artificial respiration, as well as, first aid for eyes and skin contact with liquid H2S. Everyone needs to master these necessary skills.

Hydrogen Sulfide Drilling Operations Plan
Plantation Operating, LLC
Cypress #1
1280' FNL & 1650' FEL
Section B-8 – T23S – R27E

1. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

A. The hazards and characteristics of hydrogen sulfide gas.
B. The proper use of personal protective equipment and life support systems.
C. The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
D. The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

A. The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
B. Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
C. The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a known hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

2. Hydrogen Sulfide Safety Equipment and Systems

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the intermediate casing.

A. Well Control Equipment
- i. Flare line with automatic igniter or continuous ignition source.
- ii. Choke manifold with minimum of one adjustable choke.
- iii. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- iv. Auxiliary equipment including rotating head and annular type blowout preventer.

B. Protective Equipment for Essential Personnel
Thirty minute self contained work unit located at briefing area as indicated on wellsite diagram.

C. Hydrogen Sulfide Protection and Monitoring Equipment
Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 ppm.

D. Visual Warning Systems
i. Wind direction indicators as indicated on the wellsite diagram.
ii. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

3. Mud Program

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

4. Metallurgy

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

5. Communications

State and County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

6. Well Testing

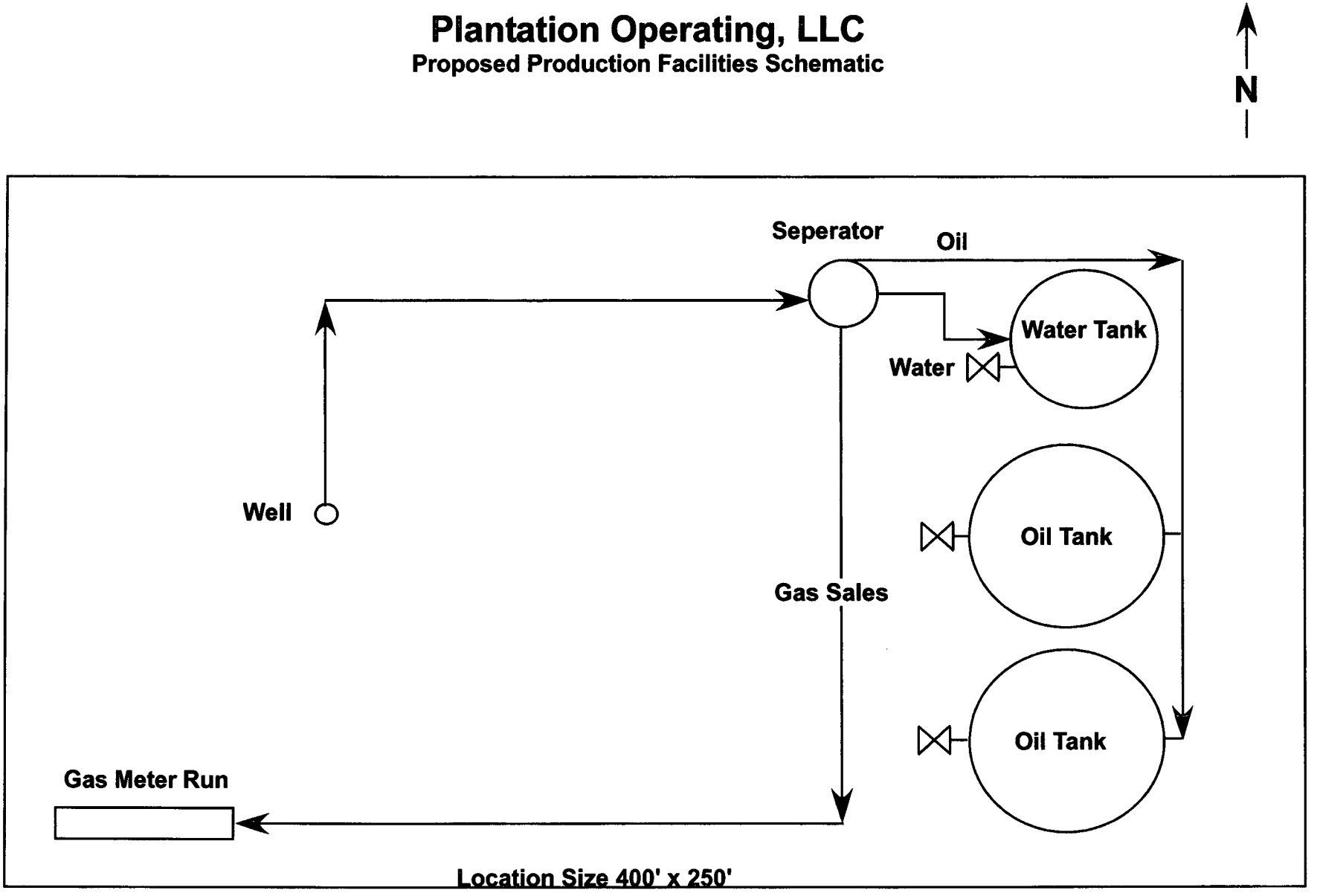
Drill stem testing is not an anticipated requirement for evaluation of this well. If a drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

7. General Requirements

Plantation Operating has researched this area and no high concentration of H2S was found. Plantation Operating will have on location and working all H2S safety equipment before Delaware formation at 2000'.

Plantation Operating, LLC

Proposed Production Facilities Schematic



Plantation Operating LLC
Exhibit # 3
Cypress # 1
Sec B-8, T-23S, R-27E
1280' FNL & 1650' FSL
Eddy County, NM