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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

JUL 18 2007
OCD-ARTESIA

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

[1] Operator Name and Address	[2] OGRID Number
CHI OPERATING, INC P.O. BOX 1799 MIDLAND, TEXAS 79702	004378
	[3] API Number 30 – 015- 20430

[5] Property Code	[5] Property Name	[6] Well No.
36614	MERLAND "B"	1

[9] Proposed Pool 1	[10] Proposed Pool 2
Wye; Delaware	

[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
G	30	22S	27E		1980	NORTH	1980	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
E	O		P	3172'
[16] Multiple	[17] Proposed Depth	[18] Formation	[19] Contractor	[20] Spud Date
	5196'	DELAWARE		ASAP

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
130'	1000'	1000' +

Pit Liner Synthetic ☐ Mm required unless condition dictate stronger mils thick Clay ☐ Pit Volume_____bbls Drilling Method

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
EXISTING CSGS.	13 3/8"	48# H-40	335'		CIRC/50sks
EXISTING CSGS.	9 5/8"	40# N-80, 40/36# K-	5300'		2 Stage /DV @ 1642'
					TOC @ 360' TEMP

[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. MIRU WORKOVER UNIT & EQUIPMENT. REMOVE DRYHOLE MKR INSTALL STARTING HEAD BASED ON WHAT IS FOUND NUBOP, & tst to 3000# PU BIT, DCs & DRILL OUT SURFACE PLUG. DRILL OUT PLUG @ 200' (TAGGED) DRILL OUT PLUG @ ±3015'. TAG PLUG @ 5196' (TAGGED) . CLEAN UP WELL BORE PREP TO PERF & TEST DELAWARE ZONE(S).

NOTE NO EARTH PIT(S) REQUIRED.

SENT NOTICES AND APPLICATION TO THE CITY OF CARLSBAD.

[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. GARY WOMACK

Title ENGINEER

E-mail Address Garyw@chienergyinc com

Date 97/16/2007 Phone· 432-685-5001

OIL CONSERVATION DIVISION	
Approved by·	BRYAN G. ARRANT
Title·	DISTRICT II GEOLOGIST
Approval Date: JUL 2 2 2007	Expiration Date JUL 2 2 2008
Conditions of Approval Attached ☐	

District I
1625 N. French Dr., Hobbs, NM 88240
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1301 W. Grand Avenue, Artesia, NM 88210
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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

RECEIVED - OCD - ARTESIA - SEP 2006

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-20430	96378	Wyo; Delaware

[4] Property Code	[5] Property Name	[6] Well Number
	MERLAND "B"	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
4378	CHI OPERATING, INC.	3172'

[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
G	30	22S	27E		1980	NORTH	1980	EAST	EDDY

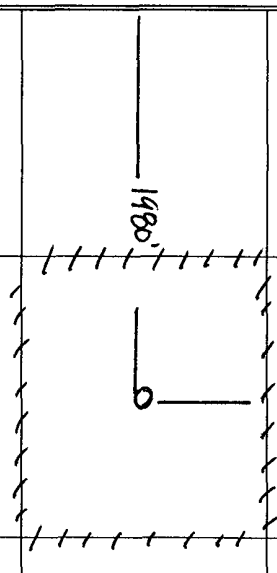
[11] Bottom Hole Location If Different From Surface

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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
40			

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

[16]



[17] OPERATOR CERTIFICATION

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

Signature

GARY WOMACK
Printed Name

Garyw@chienergyinc com ENGINEER
Title and E-mail Address

9/21/06
Date

[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.

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number

Phone (432) 685-5001 *Chi Operating, Inc.* Fax (432) 687-2662
P.O. Box 1799
Midland, TX 79702

Mr. Jon R. Tully
City Administrator
City of Carlsbad
P.O. Box 1569
Carlsbad, New Mexico 88221

9/21/06

Re: Oil & Gas Well Re-Entry Permit
Chi Operating, Inc
Merland "B" #1,
Section 30-T22S-R27E
Eddy County, New Mexico

Dear Mr. Tully,

Enclosed is our Oil, Gas, Pipeline Application for Permit/License concerning the subject well. Included with our application is the supporting documentation as required as well as the required fee of $5,000.00.

Please advise Chi Operating, Inc. of our public hearing date before the city counsil in order that we may get our signage in place, as well as the notice placed in the newspaper in accordance with the city ordinance. Please don't hesitate to call me at 432-685-5001 if any additional information is required.

Sincerely,

Gary Womack
Cc/file

CITY OF CARLSBAD, NM
P.O. BOX 1569
CARLSBAD, NM 88221

OIL AND GAS WELLS AND PIPELINES
APPLICATION FOR PERMIT

Carlsbad Code of Ordinances, Chapter 34

A separate application is required for each well, trunkline pipeline and each water or gas repressurizing or injection facility.

TYPE OF PERMIT REQUESTED	INSPECTION / FILING FEE
☐ Drill Well	☐ $5,000.00
☒ Re-enter/Deepen Existing Well	☒ $5,000.00
☐ Water/Gas Repressurizing/Injection Facility	☐ $5,000.00
☐ Trunk Line	☐ $5,000.00
☐ Other: _____ (Describe)	☐ $500.00

Applicant Name:	CHI OPERATING, INC.
Applicant's Address: Street / P.O. Box:	P.O. BOX 1799
City, State, Zip Code:	MIDLAND, TEXAS 79702
If Corporation, Name of NM Registered Agent:	CLIFTON B. MANN, JR.
Application Contact Name and Title:	GARY WOMACK, ENGINEER
Address:	P.O. BOX 1799 MIDLAND, TEXAS 79702
Telephone Number(s):	432-685-5001
Fax Number:	432-687-2662
Emergency Contact Name and Title:	CLIFTON B. MANN, JR. FIELD FOREMAN
Address:	#5 HAVEN HILL ROAD, ARTESIA NM 88201
Telephone Number(s):	

Proposed site of all wells, pipelines, or repressurizing or injection facilities (including location of well at surface, location of the bottom of well hole, location of gathering lines, crossings, etc.): MERLAND B #1, UNIT G, 1980' FNL & 1980' FEL, SECTION 30 of T22S - R27E, EDDY COUNTY, NEW MEXICO. BHL - SAME FACILITY - SAME

Name of lease owner(s): MERLAND, INC.

Accurate description of facility location (with legal description of all acreage dedicated to well) and/or legal description of easements to be used by pipeline(s): UNIT G, 1980' FNL & 1980' FEL, SECTION 30 of T22S - R27E, EDDY COUNTY, NEW MEXICO. ACREAGE DEDICATED: SW/4 NE/4 SECTION 30

Ground elevation at well site: 3172' GL

Proposed depth of well or pipeline: 5196' PTD

APPLICATION CONTINUES ON REVERSE SIDE

Identify location of public notice signage: HWY 62-180 & CHAPMAN RD, CHAPMAN RD & OLD CAVERN HWY., WEST .4 MILE FROM INTER. of CHAPMAN RD & OLD CAVERN HWY

Detailed explanation of operating pressures of all pipelines and facilities:

WELL WILL BE A PUMPING WELL. "SEE ATTACHMENT"

Location and operating characteristics of compressor, compressor control and safety devices: IF WARRANTED, WILL BE AT THE SURFACE LOCATION OF THE WELL & WILL ADHERE TO CITY ORDINANCES.

Attachments:

- ☐ **Surveyor's Plat, including:**
  - ○ Property Lines
  - ○ Surface Contours
  - ○ Right-of-Way Boundaries
  - ○ Distance to Nearest:
    - • Residential Structure
    - • Commercial Structure
- ☐ **Well Drilling Program**
  - ☒ Not Applicable
- ☐ **All Applications and Forms Submitted to or Received from:**
  - ○ OCD, List: APD - PLAT - H2S
  - ○ BLM, List: _____
  - ○ State Land Office, List: _____
- ☒ **Well Re-Entry or Deepening Information (Sec. 34-33(c))**
  - ○ Not Applicable

Signature of authorized agent: Robin Askew	Date: 9-21-06
Typed or Printed name of authorized agent: ROBIN ASKEW	

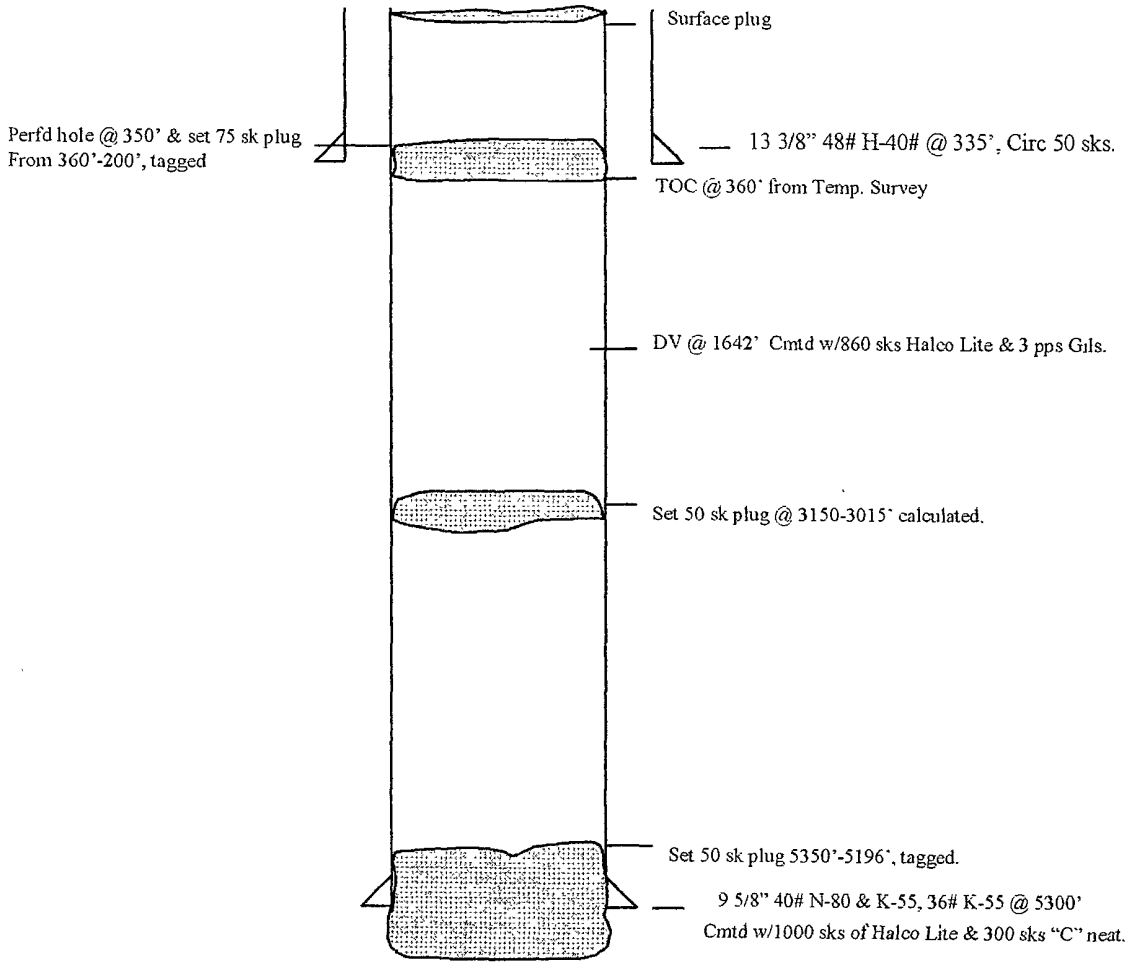
This application shall be filed with the City Administrator. Applications to drill, reenter or deepen a well or to install a water or gas repressurizing or injection facility or a trunk line shall be accompanied by an inspection fee of $5,000.00. All other applications shall be accompanied by a non-refundable filing fee of $500.00. The filing fee shall be paid in cash, company check, cashier's check or certified check made payable to the City of Carlsbad.

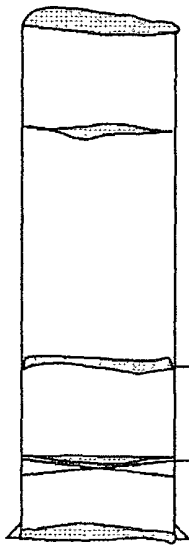
If a permit is granted, it will incorporate by reference and require compliance with all applicable City Ordinances and regulations, including, but not limited to the Wellhead and Water Protection Area, and all applicable laws, rules, regulations and requirements of the OCD, the State Land Office and the Bureau of Land Management. For a well, the permit will include by reference and require compliance with BLM Onshore Oil and Gas Order No. 2 (Drilling Operations) and OCD Rule 118 (Hydrogen Sulfide Gas). A PERMIT EXPIRES ONE YEAR AFTER THE DATE OF ITS APPROVAL if the permittee has not undertaken the activity authorized by the permit.

Inspection Fee:	☐ $5,000	**Payment:**	☐ Cash	☒ Company Check
Filing Fee:	☐ $500		☐ Cashier's Check	☐ Certified Check
Permit Action:	☐ Approved by Council	☐ Disapproved by Council		
Date of Action:	_____			

Chi Operating, Inc

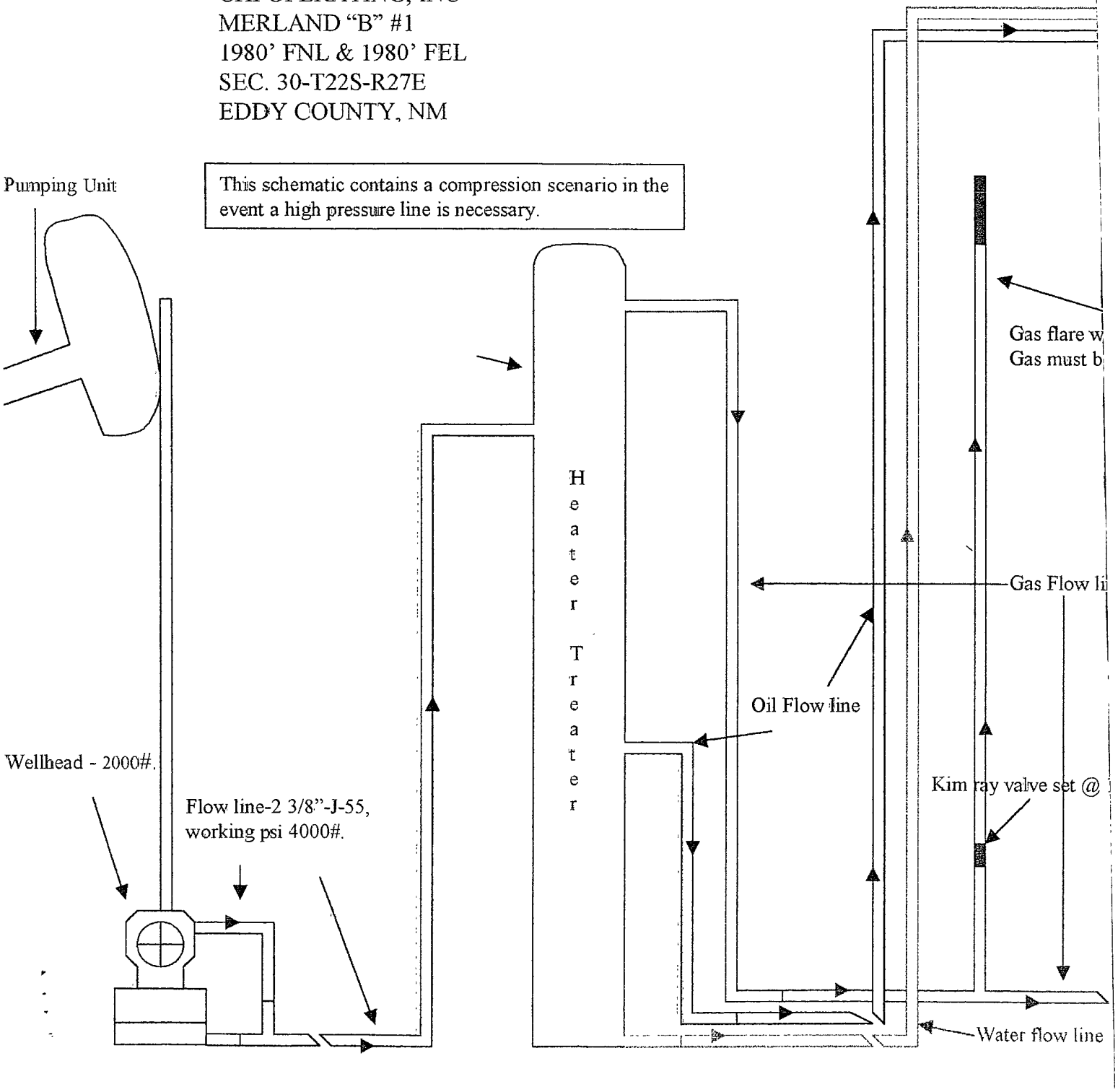
Merland "B" #1
Sec 30, T22S-R27E
Eddy Co. N.M.

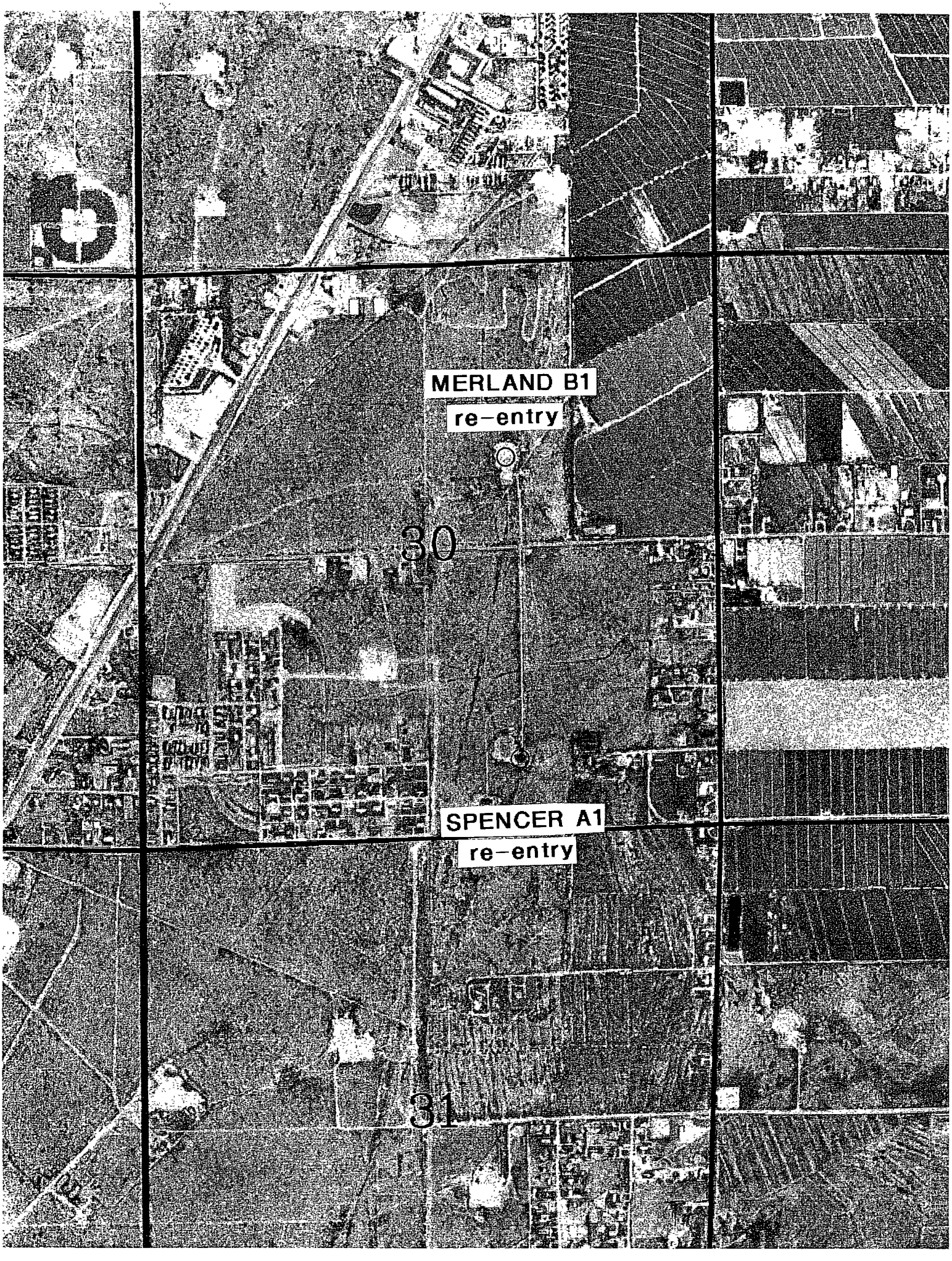




CASING: Top: 3541' 5 ½"-17#-K-55
5739' 5 ½"-17#-N-80
2463' 5 ½"-20# N-80

CHI OPERATING, INC
MERLAND "B" #1
1980' FNL & 1980' FEL
SEC. 30-T22S-R27E
EDDY COUNTY, NM




MERLAND B1
re-entry
30
SPENCER A1
re-entry
31

CHI OPERATING, INC
HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN
FOR DRILLING/COMPLETING/WORKOVER/FACILITY
WITH THE EXPECTATION OF H2S IN EXCESS OF 100 PPM

WELL/FACILITY IN QUESTION
Merland "B" #1
RE-ENTRY
SEC 30-T22S-R27E
1980' FNL & 1980' FEL
EDDY COUNTY, NM

This well/facility is not expected to have H2S, but due to the sensitive location, The following is submitted as requested

TABLE OF CONTENTS

GENERAL H2S EMERGENCY ACTIONS:

In the event of an H2S emergency, the following plan will be initiated.

1) All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area".

2) If for any reason a person must enter the hazardous area, they must wear a SCBA (Self contained breathing apparatus)

3) Always use the "buddy system"

4) Isolate the well/problem if possible

5) Account for all personnel

6) Display the proper colors warning all unsuspecting personnel of the danger at hand.

7) Contact the Company personnel as soon as possible if not at the location (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and co-ordinate the necessary duties to bring the situation under control, and if necessary, the notification of emergency response agencies and residents.

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S

1) All personnel will don the self-contained breathing apparatus.

2) Remove all personnel to the "safe area". (always use the "buddy system"

3) Contact company personnel if not on location.

4) Set in motion the steps to protect and or remove the general public to an upwind "safe area". Maintain strict security & safety procedures while dealing with the source.

5) No entry to any unauthorized personnel.

6) Notify the appropriate agencies: City Police-City street(s)
State Police-State Rd
Count Sheriff-County Rd.
(will assist in general public evacuation/safety while maintaining roadblocks)

7) Call the NMOCD

If at this time the supervising person determines the release of H2S cannot be contained to the site location and the general public is in arms way he will take the necessary steps to protect the workers & the public.

EMERGENCY CALL LIST: (Start and continue until ONE of these people have been reached)

	OFFICE	MOBILE	HOME
Chi Operating, Inc.	432-685-5001		
Sonny Mann	505-365-2338	432-694-7062	505-365-2722
John Wolf	432-685-5001	432-634-7061	432-682-4905
Bill Bergman	432-685-5001	432-557-8773	432-689-4011

EMERGENCY RESPONSE NUMBERS: Eddy County, New Mexico

State Police	Eddy County	505-748-9718
	Lea County	505-392-5588
Sheriff	Eddy County	505-746-2701
	Lea County	505-
Emergency Medical Service (Ambulance)		911 or 505-746-2701
Eddy County Emergency Management (Harry Burgess)		505-887-9511
State Emergency Response Center (SERC)		505-476-9620
Police Department - Artesia		505-746-5001
Fire Department - Artesia		505-746-5001
Police Department - Carlsbad		505-885-2111
Fire Department - Carlsbad		505-885-3125
Fire Department - Loco Hills		505-677-2349
(NMOCD) New Mexico Oil Conservation Division,		
District I (Lea, Roosevelt, Chavez, Curry)		505-393-6161
District II (Eddy, Chavez)		505-748-1283
Callaway Safety		505-392-2973
Indian Fire & Safety		800-530-8693
American Safety		505-746-1096
BJ Services		505-746-3146
Schlumberger		505-748-1392
Cudd Pressure Control		800-990-2833

In the event greater than 100 ppm H2S is present, the ROE (Radius Of Exposure) calculations will be done to determine if the following is warranted:

- 100 ppm at any public area (any place not associated with this site)
- 500 ppm at any public road (any road which the general public may travel)
- 100 ppm radius of 3000' will be assumed if there is insufficient data to do the calculations, and there is a reasonable expectation that H2S could be present in concentrations greater than 100 ppm in the gas mixture.

Calculation for the 100 ppm ROE:

X = [(1.589) (**concentration**) (Q)] (0.6258)

Calculation for the 500 ppm ROE:

X = [(0.4546) (concentration) (Q)] (.06258)

(H2S **concentrations** in decimal form:)

10,000 ppm + = .01
1,000 ppm + = .001
100 ppm + = .0001
10 ppm + = .00001

EXAMPLE: If a well/facility has been determined to have 100 ppm H2S in the gas mixture and the well/facility is producing at a gas rate of 200 MCFPD then:

ROE for 100 PPM X=[(1.589)(.0001)(200,000)] (0.6258)
X= 8.8'

ROE for 500 PPM X=[(.4546)(.0005)(200,000)] (0.6258)
X= 10.9'

(These calculations will be forwarded to the appropriate District NMOCD office when applicable)

PUBLIC EVACUATION PLAN:

(When the supervisor has determined that the General Public will be involved, the following plan will be implemented)

1) Notification of the emergency response agencies of the hazardous condition and Implement evacuation procedures.

2) A trained person in H2S safety, shall monitor with detection equipment the H2S Concentration, wind and area of exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. **(All monitoring equipment shall be UL approved, for use in class I groups A,B,C, & D, Division I, hazardous locations. All monitors will have a minimum capability of measuring H2S, oxygen, and flammable values.)**

3) Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.

4) The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

PROCEDURE FOR IGNITING AN UNCONTROLABLE CONDITION:

The decision to ignite a well should be a last resort and one if not both of the following pertain.

1) Human life and/or property are in danger.

2) There is no hope of bring the situation under control with the prevailing conditions at the site.

INSTRUCTIONS FOR IGNITION:

1) Two people are required. They must be equipped with positive pressure; self contained breathing apparatus and a "D"-ring style, full body, OSHA approved safety harness. Non-flammable rope will be attached.

2) One of the people will be a qualified safety person who will test the atmosphere for H2S, Oxygen, & LFL. The other person will be the company supervisor; he is responsible for igniting the well.

3) Ignite up-wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25mm flare gun shall be used, with a ±500' range to ignite the gas.

4) Prior to ignition, make a final check for combustible gases.

5) Following ignition, continue with the emergency actions & procedures as before.

REQUIRED EMERGENCY EQUIPMENT:

1) Breathing Apparatus:

- Rescue Packs (SCBA) - 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.

- Work/Escape Packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.

- Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.

2) Signage & Flagging:

- One Color Code Condition Sign will be placed at the entrance to the site reflecting the possible conditions at the site.

- A Colored Condition flag will be on display, reflecting the condition at the site at that time.

3) Briefing Area: Two, perpendicular areas will be designated by signs and readily accessible.

4) Wind Socks: Two windsocks will be placed in strategic locations, visible from all angles.

5) H2S Detectors and Alarm: The stationary detector with three (3) sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 15 ppm. Calibrate a minimum of every 30 days or as needed. The 3 sensors will be placed in the following places: (Gas sample tubes will be stored in the safety trailer)

- Rig Floor
- Bell Nipple
- End of Flow line or where well bore fluid are being discharged.

6) Auxiliary Rescue Equipment:

- Stretcher
- Two OSHA full body harness
- 100' of 5/8" OSHA approved rope
- 1 – 20# Class ABC fire extinguisher
- Communication via cell phones on location and vehicles on location.

USING SELF-CONTAINED BREATHING AIR EQUIPMENT (SCBA):

SCBA should be worn when any of the following are performed:

- Working near the top or on top of a tank.
- Disconnecting any line where H2S can reasonably be expected.
- Sampling air in the area to determine if toxic concentrations of H2S exist.
- Working in areas where over 10 ppm on H2S has been detected.
- At any time there is a doubt as the level of H2S in the area.

All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location.

Facial hair and standard eyeglasses are not allowed with SCBA.

Contact lenses are never allowed with SCBA.

Air quality shall continuously be checked during the entire operation.

After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected.

All SCBA shall be inspected monthly.

RESCUE & FIRST AID FOR VICTOMS OF HYDROGEN SULFIDE (H2S) POISONING:

Do not panic.

Remain calm & think.

Get on the breathing apparatus.

Remove the victim to the safe breathing area as quickly as possible. Upwind an uphill from source or cross wind to achieve upwind.

Notify emergency response personnel.

Provide artificial respiration and /or CPR, as necessary.

Remove all contaminated clothing to avoid further exposure.

A minimum of two (2) personnel on location shall be trained in CPR and First Aid.

H2S TOXIC EFFECTS:

H2S is extremely toxic. The acceptable ceiling for eight hours of exposure is 10 ppm, which is .001% by volume. H2S is approximately 20% heavier than air (Sp.Gr=1.19 / Air=1) and color less. It forms an explosive mixture with air between 4.3% and 46.0%. By volume hydrogen sulfide (H2S) is almost as toxic as hydrogen cyanide and is 5-6 times more toxic than carbon monoxide.

Various Gases

Common Name	Chemical Abbrev.	Sp. Gr.	Threshold Limits	Hazardous Limits	Lethal Concentration
Hydrogen Sulfide	H2S	1.19	10 ppm 15 ppm	100 ppm/ hr	600 ppm
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/ hr	300 ppm
Sulfur Dioxide	SO2	2.21	2 ppm	N/A	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	Combustible @ 5%	N/A

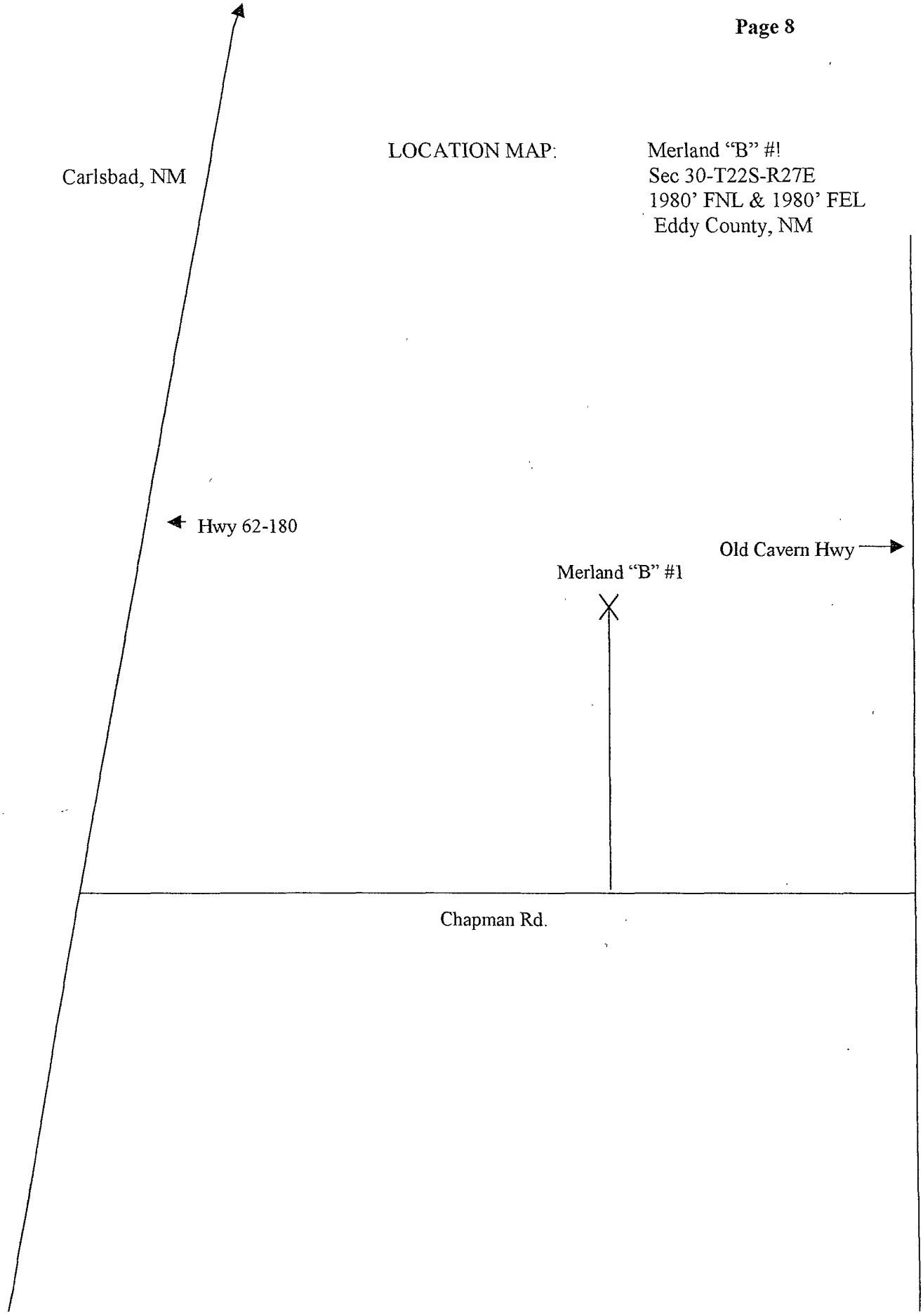
1 Threshold limit – Concentrations at which it is believed that all workers may be repeatedly exposed, day after day without Adverse effects.
2 Hazardous limit – Concentration that may cause death
3 Lethal concentration – Concentration that will cause death with short-term exposure.
4 Threshold limit – 10 ppm – NIOSH guide to chemical hazards
5 Short-term threshold limit.

PHYSICAL EFFECTS OF HYDROGEN SULFIDE:

CONCENTRATIONS		PYSICAL EFFECTS
.001%	10 ppm	Obvious and unpleasant odor. Safe for 8hr exposure
.005%	50 ppm	Can cause some flu-like symptoms and can cause pneumonia
.01%	100 ppm	Kills the sense of smell in 3 –15 minutes. May irritate eyes and throat.
.02%	200 ppm	Kills the sense of smell rapidy. Severly irritates eyes and throat. Severe flu-like symptoms after 4 or more hours. May cause lung damage and/or death.
.06%	600 ppm	Loss of consciousness quickly, death will result in not rescued promptly.

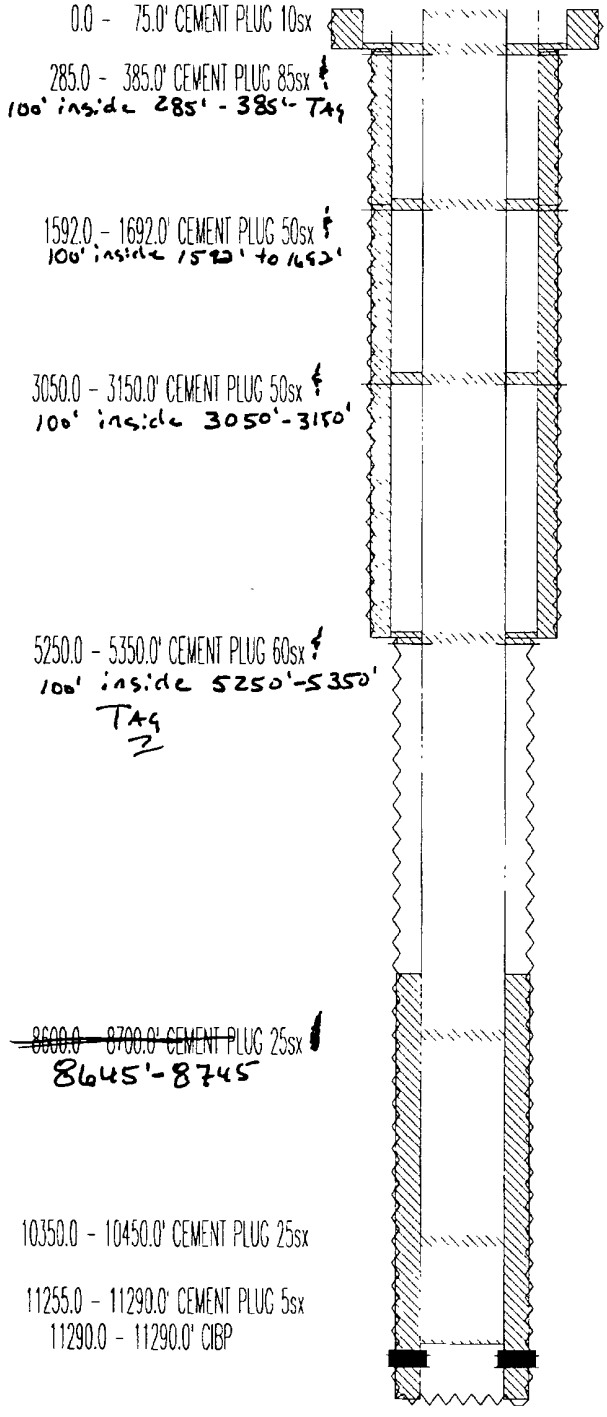
LOCATION MAP:

Merland "B" #!
Sec 30-T22S-R27E
1980' FNL & 1980' FEL
Eddy County, NM



OXY USA WTP LP
MERIAND B 1
SEC 30 T22S R27E EDDY NM

Install Dry hole marker As Per Rule 202.B.2



0.0 - 75.0' CEMENT PLUG 10sx

285.0 - 385.0' CEMENT PLUG 85sx
100' inside 285' - 385' Tag

1592.0 - 1692.0' CEMENT PLUG 50sx
100' inside 1592' to 1692'

3050.0 - 3150.0' CEMENT PLUG 50sx
100' inside 3050'-3150'

5250.0 - 5350.0' CEMENT PLUG 60sx
100' inside 5250'-5350'
Tag
2

~~8600.0 - 8700.0' CEMENT PLUG 25sx~~
8645'-8745

10350.0 - 10450.0' CEMENT PLUG 25sx

11255.0 - 11290.0' CEMENT PLUG 5sx
11290.0 - 11290.0' CIBP

0.0 - 335.0' 17 1/2" OD HOLE
0.0 - 335.0' CEMENT 380sx-CIRC
0.0 - 335.0' 13 3/8" OD SURF CSG

385.0 - 385.0' SQUEEZE PERFS

1692.0 - 1692.0' SQUEEZE PERFS

3150.0 - 3150.0' SQUEEZE PERFS

335.0 - 5300.0' 12 1/4" OD HOLE
360.0 - 1642.0' CEMENT 860sx-TS
1642.0 - 1642.0' DVTOOL
1642.0 - 5300.0' CEMENT 1300sx-CALC
0.0 - 5300.0' 9 5/8" OD INT CSG

5350.0 - 5350.0' SQUEEZE PERFS

5300.0 - 11760.0' 8 3/4" OD HOLE
8140.0 - 11758.0' CEMENT 1000sx-TS
0.0 - 11758.0' 5 1/2" OD PROD CSG

11340.0 - 11484.0' ABANDONED PERFS MORROW

PBTD: 11710'
TD: 11760'

Notify OCD 24 hrs. prior to any work done

Salt gel mud consisting of 10# Brine W/25# of gel per bbl must be placed between each plug

Arrant, Bryan, EMNRD

From: Pam Corbett [pamc@chienergyinc.com]
Sent: Monday, June 25, 2007 3:16 PM
To: Arrant, Bryan, EMNRD
Subject: RE: Merland B # 1 and Spencer A # 1

Hey and Bryan: I guess I need to look into this and see what I need to do to get things straight.

From: Arrant, Bryan, EMNRD [mailto:bryan.arrant@state.nm.us]
Sent: Friday, September 29, 2006 2:22 PM
To: PamC@Chienergyinc.com; garyw@chienergyinc.com
Cc: Gum, Tim, EMNRD
Subject: Merland B # 1 and Spencer A # 1

Dear Pam and Gary-Good Friday Afternoon,

In review of the above noted wells, please submit the following for further review/and or approval:

A detailed H2S well contingency plan that meets the requirements of NMOCD's Rule 118.

The distance to the nearest public dwelling(s). In addition, please submit a detailed map of the immediate area and residences within a 1/4 mile radius.

How does Chi Operating, Inc. intend to test their BOPs / pressure control devices on the re-entry of these wells?

Are one or both of these wells inside the City limits of Carlsbad?
There is no notice to the City of Carlsbad as required per NMOCD Rule 19.15.3.102 (B) (1). on the C-101 forms submitted.

Please call if you have any ?????????s.

Bryan Arrant
NMOCD District II
District Geologist
505-748-1283 ext. 103

CC: Well file

REVIEW OF PERMIT APPLICATION

Permit Applicant: Chi Operating, Inc
P.O. Box 1799
Midland, TX

Responsible Party: Mr. Gary Womack

Permit Type: Reenter Existing Well

Well Name: Merland "B" #1

Well Location: Section 30, Township 22 South, Range 27 East
Eddy County
City of Carlsbad

Prepared by: Dave Henard
RESPEC
4775 Indian School Rd. NE, Suite 300
Albuquerque, New Mexico 87110

The following observations and recommendations are based on City of Carlsbad's requirements for oil and gas industry operations within the jurisdiction of the City. Observations and recommendations are based on correlations of city ordinances, applicable federal and state regulations, and standard oilfield operating practices.

RECOMMENDATION: Additional information is needed to complete permit review.

1. Provide a statement in writing that a daylight rig will be used for the re-entry completion. Direct communication between Sonny Mann and the inspector is required if unforeseen problems require a change in work schedule.

2. The H2S contingency plan states that H2S is not expected in this well. The re-entry and completion procedures at the Hagerman #1 well confirmed H2S was produced from the Delaware Fm. As a matter of fact, Level C PPE was required on numerous occasions so rig personnel could monitor production in temporary on site tank and H2S was found on numerous occasions having accumulated in the cellar that exceeded acceptable levels of exposure and could have affected air quality on the rig floor. During the Hagerman #1 completion, Chi provided 24hour-7day continuous H2S **monitoring** and **security** at the location. The perimeter of the location was monitored regularly to establish that fugitive H2S gas was not affecting rig hands and migrating off site to residential areas. The inspector suggests that this was a key element in a successful operation at the Hagerman #1.

3. Provide confirmation that the re-entry is not located within 500 feet from any residential, industrial or commercial building. This was confirmed by the inspector and Mr. Aguilar on November 6, 7, 2006.
4. Cities Service Oil Company submitted sundry notice dated June 9, 1971 reporting 95/8" 1st intermediate string casing completion at 5300' with a DV tool at 1642'. The report states that cement did not circulate but a temperature survey indicated top of cement at 360'. Provide the techniques to be used to confirm that an adequate cement bond exists above the subsurface objective in the Delaware Fm. and determine condition of existing casing.
5. Provide a statement that all engines used during the reentry will have adequate mufflers and all efforts will be performed to address noise abatement.
6. Provide a statement that all reentry equipment will be removed from the location within 30 days of completion unless additional time is approved by the inspector.

7. Indicate if natural gas (including casinghead gas) will be flared including estimated quantities, time needed for flare operation, procedures for prior notification of fire chief and inspector and fire prevention equipment that will be on stand-by. Note: Long term gas flare operations within the city limits require city council approval.

8. Provide detailed well control methods and stand-by emergency equipment for drilling out plugs to re-entry total depth.

9. Provide sanitation and cleanliness controls to be used during reentry operation at this location.

10. If a daylight rig is used, describe shut-in and safety procedures that are to be followed during down time.