

30-025-40611

HOBBS OCD

JUN 08 2012

RECEIVED



Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260

Hydrogen Sulfide (H₂S) Contingency Plan

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated North then West or East then South on caliche road. Crews should then block entrance to the location from both directions the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. Evacuation should continue if necessary West or South outside of the affected area. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- 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 this operation.
- 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.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

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

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H₂S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

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

1. The effects of H₂S metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H₂S.

1. Well Control Equipment

- A. Flare line
- B. Choke manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

2. Protective equipment for essential personnel:

- A. 30-minute SCBA units located in the doghouse and at briefing areas, as indicated on well site diagram. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. H₂S detection and monitoring equipment:

- A. Portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 PPM are reached. These units are usually capable of detecting SO₂, which is a byproduct of burning H₂S.

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 locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate..

5. Mud program:

- A. The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H₂S trim.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephones and 2-way radio
- B. Land line (telephone) communications at Office

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

Devon Energy Corp. Company Call List

<u>Artesia (575)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Robert Bell.....	748-7448	748-0178.....	746-2991
Asst. Foreman –Tommy Polly.....	748-5290	748-0165.....	748-2846
Don Mayberry.....	748-5235	748-0164.....	746-4945
Montral Walker.....	390-5182	748-0193.....	936-414-6246
Engineer – Marcos Ortiz.....	(405) 317-0666.....	(405) 552-8152.....	(405) 381-4350

Agency Call List

<u>Lea</u>	<u>Hobbs</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	NMOCD
	US Bureau of Land Management

<u>Eddy</u>	<u>Carlsbad</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office.....
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	US Bureau of Land Management
	New Mexico Emergency Response Commission (Santa Fe) ...
	24 HR
	National Emergency Response Center (Washington, DC) ..

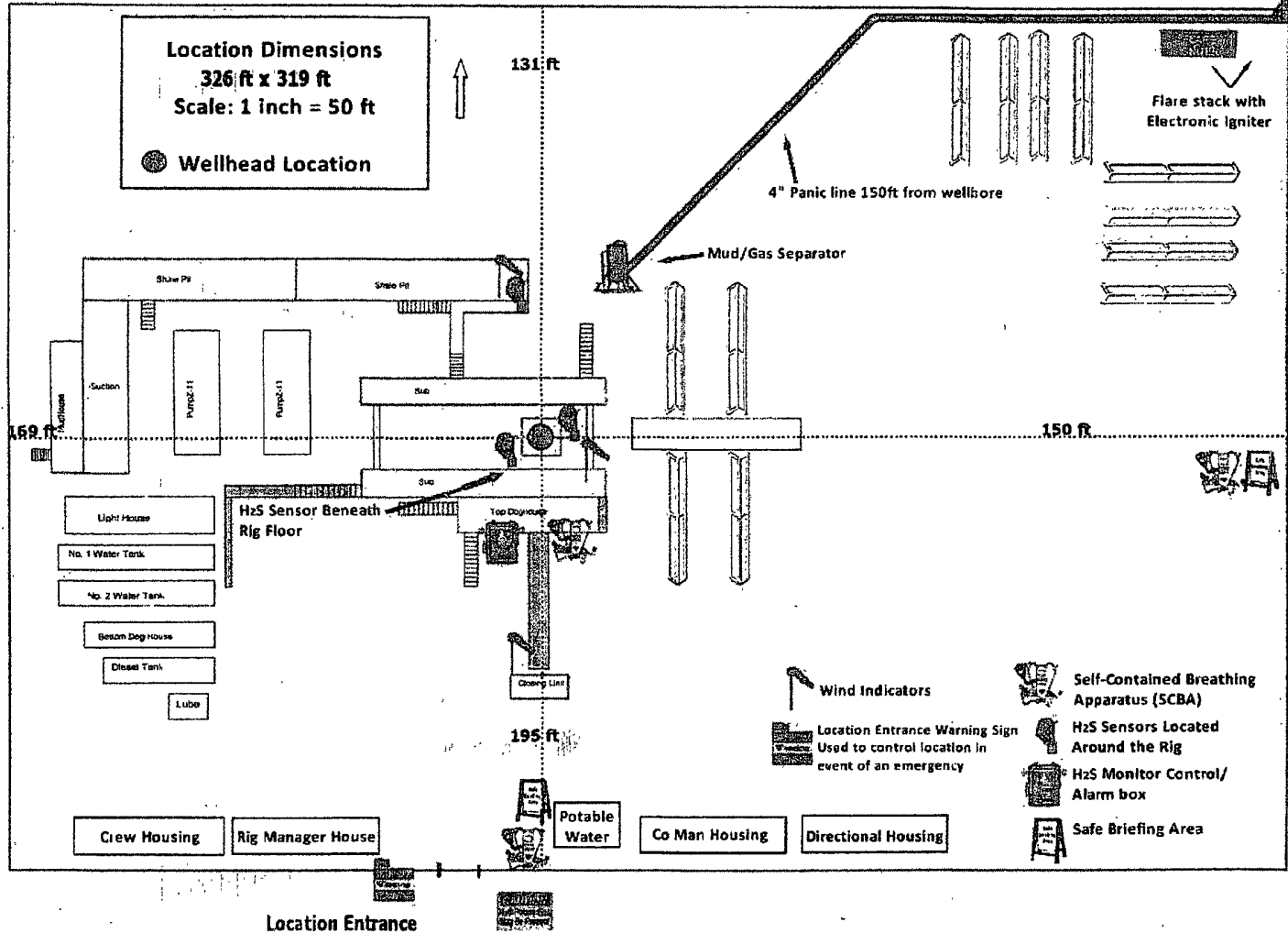
Emergency Services

	Boots & Coots IWC
	Cudd Pressure Control.....
	Halliburton
	B. J. Services.....
<i>Give</i>	Flight For Life - Lubbock, TX
<i>GPS</i>	Aerocare - Lubbock, TX
<i>position:</i>	Med Flight Air Amb - Albuquerque, NM
	Lifeguard Air Med Svc. Albuquerque, NM

Prepared in conjunction with
Wade Rohloff



Devon Energy - 1 Well Pad Rig Location Layout Safety Equipment Location





Devon Energy Corporation
20 North Broadway
Oklahoma City, OK 73102-8260

405 235 3611 Phone
www.devonenergy.com

June 5, 2012

To Whom It May Concern:

Mr. Barry Hunt is contracted by Devon Energy, L.P. to sign as their agent for APDs and Right of Ways in the state of New Mexico.

If you have any questions, please contact me at my office at (405) 228-8379.

Sincerely,


Victoria Sanchez

Supervisor, Regulatory Compliance
Mid-Continent Division
Devon Energy, L.P.

SECTION 20, T 18 S, R 35 E, N.M.P.M.

IRONHOUSE 20 STATE-1H

PROP. 128.7' LEASE ROAD

Ironhouse

Map details include contour lines (e.g., 3930, 3940, 3950), spot elevations (e.g., 3962, 3951, 3938, 3933, 3920, 3914), and various survey points marked with crosses and circles (e.g., 4-107, 4-118, 4-105, 4-103, 4-104). The map also shows a dashed line labeled 'UPL' and a solid line labeled 'D.W.P.L.'.

FROM THE JCT. OF HWY'S 529 AND 238 ABOUT 14 MILES WEST OF HOBBS, NM., GO NORTHWEST ON 238 ABOUT 4.0 MILES TO A LEASE ROAD LEFT GO WEST ON THE LEASE ROAD 1.0 MILE TO A LEASE ROAD LEFT. GO SOUTH 0.6 MI. ON THE LEASE ROAD AND CONTINUE SOUTH ON A PIPELINE ROAD FOR 0.4 MI. TO A CROSS PIPELINE ROAD GO EAST ON THE PIPELINE ROAD FOR 0.2 MI. TO THE PROPOSED LEASE ROAD LEFT AND THE LOCATION FLAG \pm 300 FEET NORTH.

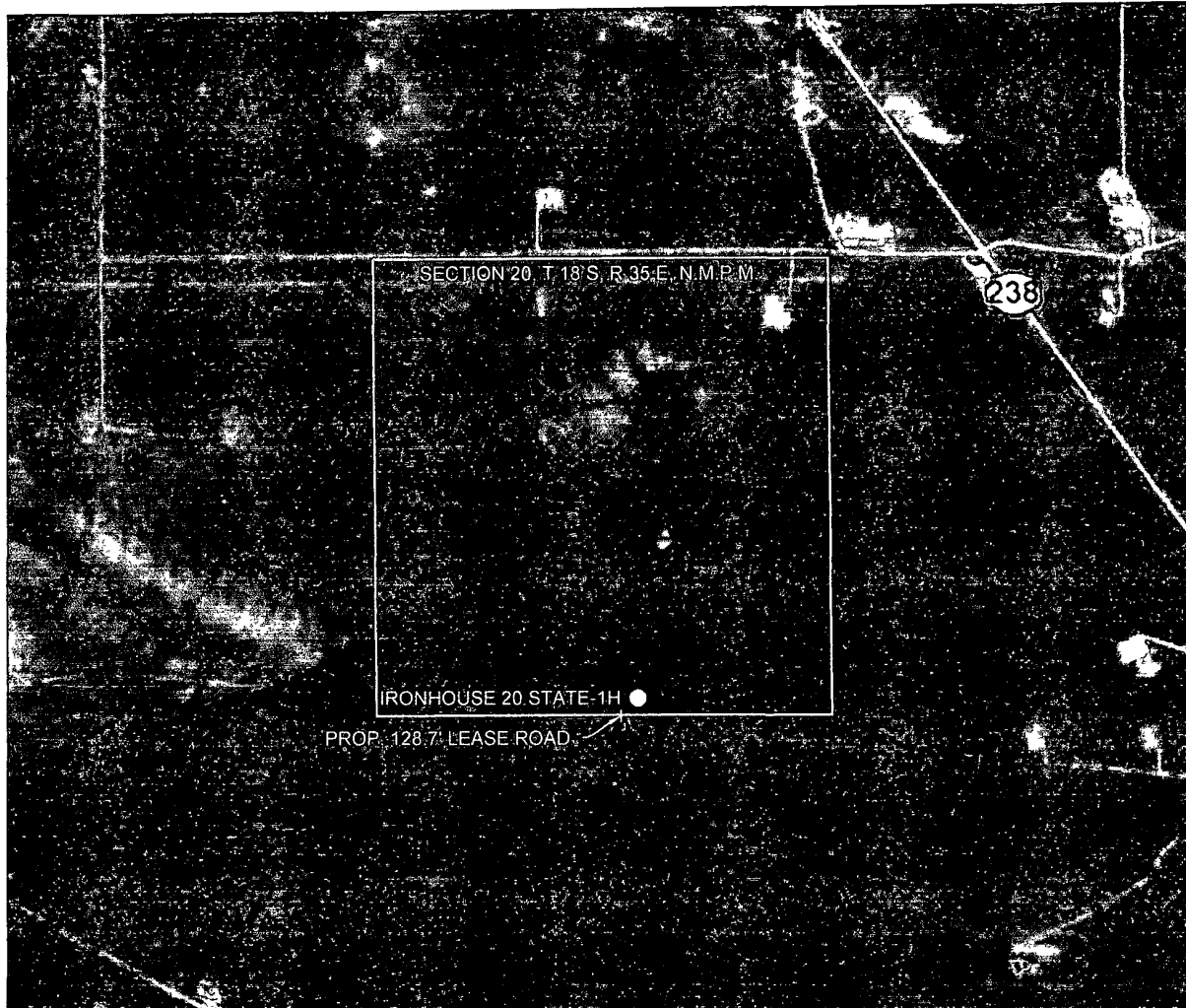


WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 SW 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181



JOB No WTC48541

AERIAL MAP



SCALE: 1" = 2000'

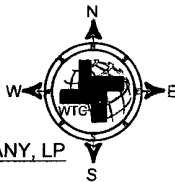
SECTION 20, T 18 S, R 35 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 200" FSL & 2240' FEL

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP

WELL NAME: IRONHOUSE 20 STATE-1H



DRIVING DIRECTIONS:

FROM THE JCT. OF HWY'S 529 AND 238 ABOUT 14 MILES WEST OF HOBBS, NM., GO NORTHWEST ON 238 ABOUT 4.0 MILES TO A LEASE ROAD LEFT. GO WEST ON THE LEASE ROAD 1.0 MILE TO A LEASE ROAD LEFT. GO SOUTH 0.6 MI. ON THE LEASE ROAD AND CONTINUE SOUTH ON A PIPELINE ROAD FOR 0.4 MI. TO A CROSS PIPELINE ROAD. GO EAST ON THE PIPELINE ROAD FOR 0.2 MI. TO THE PROPOSED LEASE ROAD LEFT AND THE LOCATION FLAG ± 300 FEET NORTH.

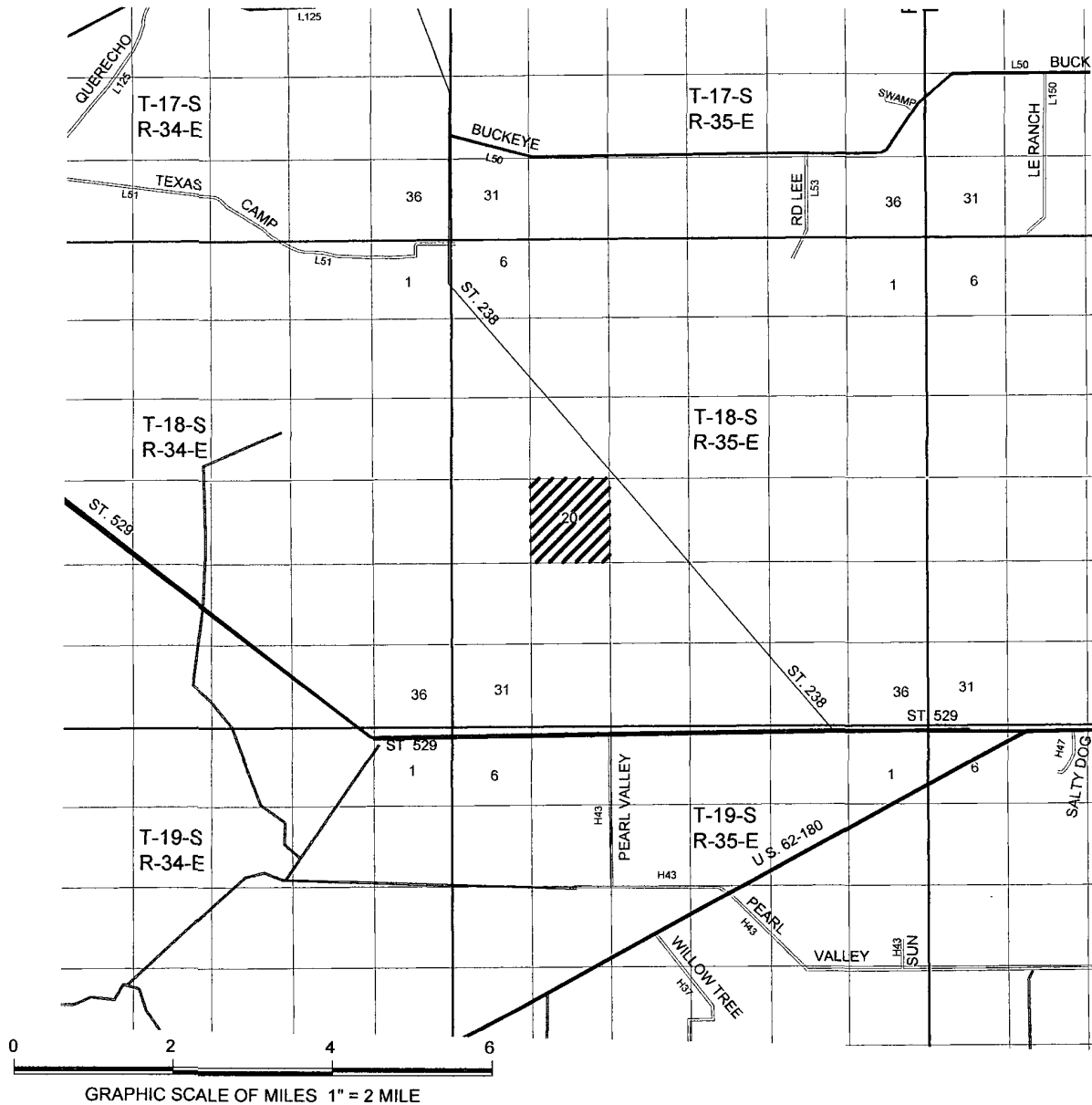


WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S W 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181



JOB No WTC48541

VICINITY MAP



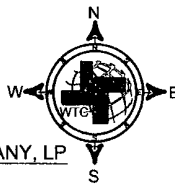
SECTION 20, T 18 S, R 35 E, N.M.P.M.

COUNTY: LEA STATE: NM

DESCRIPTION: 200' FSL & 2240' FEL

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP

WELL NAME: IRONHOUSE 20 STATE-1H



DRIVING DIRECTIONS:

FROM THE JCT. OF HWY'S 529 AND 238 ABOUT 14 MILES WEST OF HOBBS, NM., GO NORTHWEST ON 238 ABOUT 4.0 MILES TO A LEASE ROAD LEFT. GO WEST ON THE LEASE ROAD 1.0 MILE TO A LEASE ROAD LEFT. GO SOUTH 0.6 MI. ON THE LEASE ROAD AND CONTINUE SOUTH ON A PIPELINE ROAD FOR 0.4 MI. TO A CROSS PIPELINE ROAD. GO EAST ON THE PIPELINE ROAD FOR 0.2 MI. TO THE PROPOSED LEASE ROAD LEFT AND THE LOCATION FLAG ± 300 FEET NORTH.

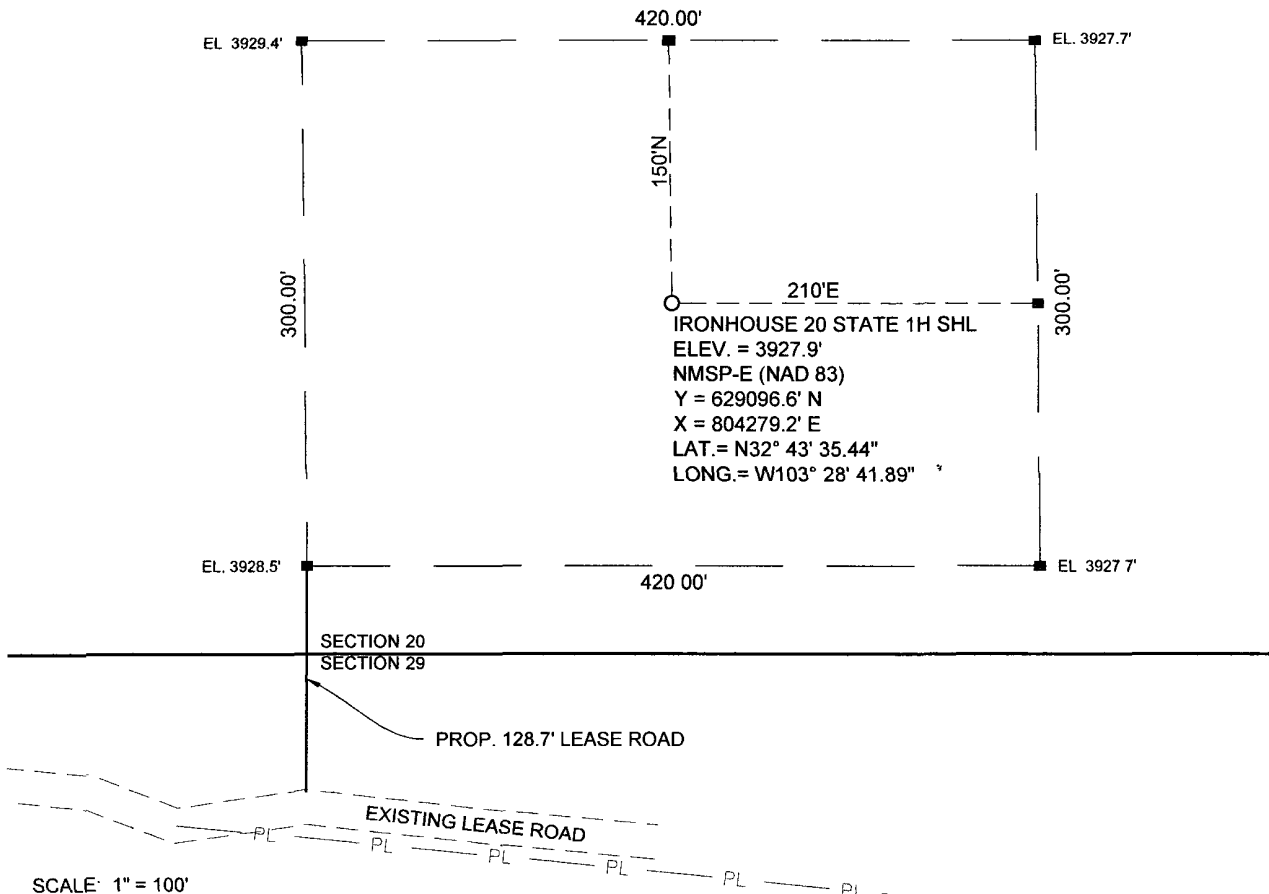


WEST TEXAS CONSULTANTS, INC
ENGINEERS PLANNERS SURVEYORS
405 S W. 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181



JOB No WTC48541

SITE LOCATION



SCALE: 1" = 100'

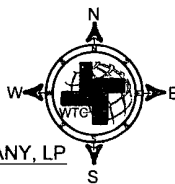
SECTION 20, T 18 S, R 35 E, N M.P.M.

COUNTY LEA STATE: NM

DESCRIPTION: 200" FSL & 2240' FEL

OPERATOR: DEVON ENERGY PRODUCTION COMPANY, LP

WELL NAME: IRONHOUSE 20 STATE-1H



DRIVING DIRECTIONS.

FROM THE JCT. OF HWY'S 529 AND 238 ABOUT 14 MILES WEST OF HOBBS, NM., GO NORTHWEST ON 238 ABOUT 4.0 MILES TO A LEASE ROAD LEFT. GO WEST ON THE LEASE ROAD 1.0 MILE TO A LEASE ROAD LEFT. GO SOUTH 0.6 MI. ON THE LEASE ROAD AND CONTINUE SOUTH ON A PIPELINE ROAD FOR 0.4 MI. TO A CROSS PIPELINE ROAD. GO EAST ON THE PIPELINE ROAD FOR 0.2 MI. TO THE PROPOSED LEASE ROAD LEFT AND THE LOCATION FLAG \pm 300 FEET NORTH.



WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S W 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181



JOB No WTC48541

Project: Lea County, NM (NAD 83)
Site: Ironhouse
Well: Ironhouse 20 State 1H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: H&P 223

SURFACE LOCATION

US State Plane 1983
New Mexico Eastern Zone
Elevation: GL 3927.9' + KB 25' @ 3952.90ft (H&P 223)
Northing: 629096.60 Easting: 804279.20 Latitude: 32° 43' 35.436 N Longitude: 103° 28' 41.895 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9227.04	0.00	0.00	9227.04	0.00	0.00	0.00	0.00	0.00	KOP/Start Build
10127.04	90.00	359.39	9800.00	572.93	-6.10	10.00	359.39	572.96	End Build
14308.55	90.00	359.39	9800.00	4754.20	-50.60	0.00	0.00	4754.47	TD

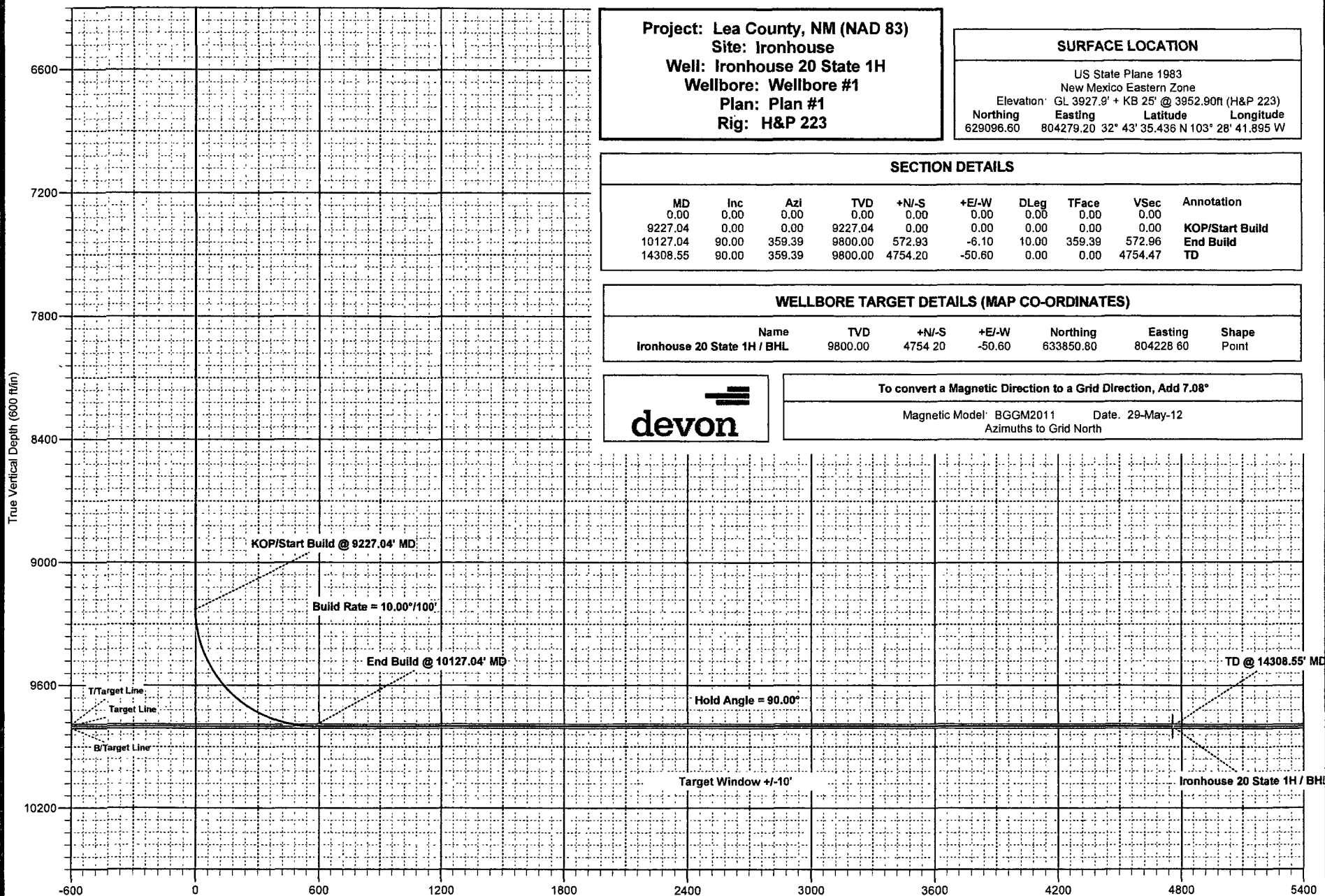
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Ironhouse 20 State 1H / BHL	9800.00	4754.20	-50.60	633850.80	804228.60	Point



To convert a Magnetic Direction to a Grid Direction, Add 7.08°

Magnetic Model: BGGM2011 Date: 29-May-12
Azimuths to Grid North



Project: Lea County, NM (NAD 83)
Site: Ironhouse
Well: Ironhouse 20 State 1H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: H&P 223

SURFACE LOCATION

US State Plane 1983
 New Mexico Eastern Zone
 Elevation GL 3927.9' + KB 25' @ 3952 90ft (H&P 223)

Northing	Easting	Latitude	Longitude
629096.60	804279.20	32° 43' 35.436 N	103° 28' 41.895 W

To convert a Magnetic Direction to a Grid Direction, Add 7.08°

Magnetic Model: BGGM2011 Date 29-May-12
 Azimuths to Grid North

devon

