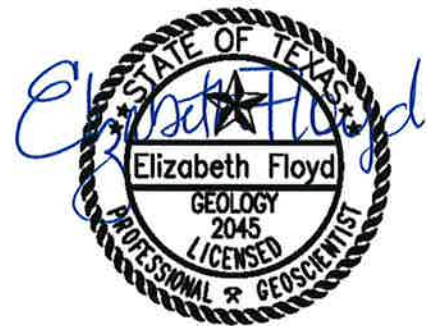


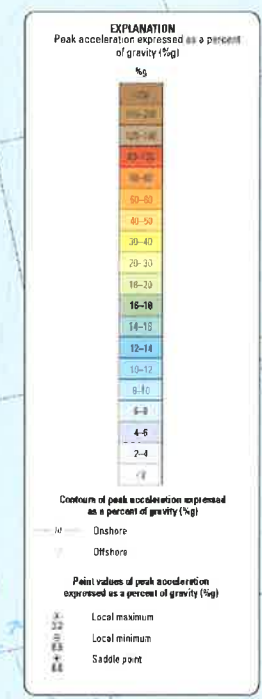
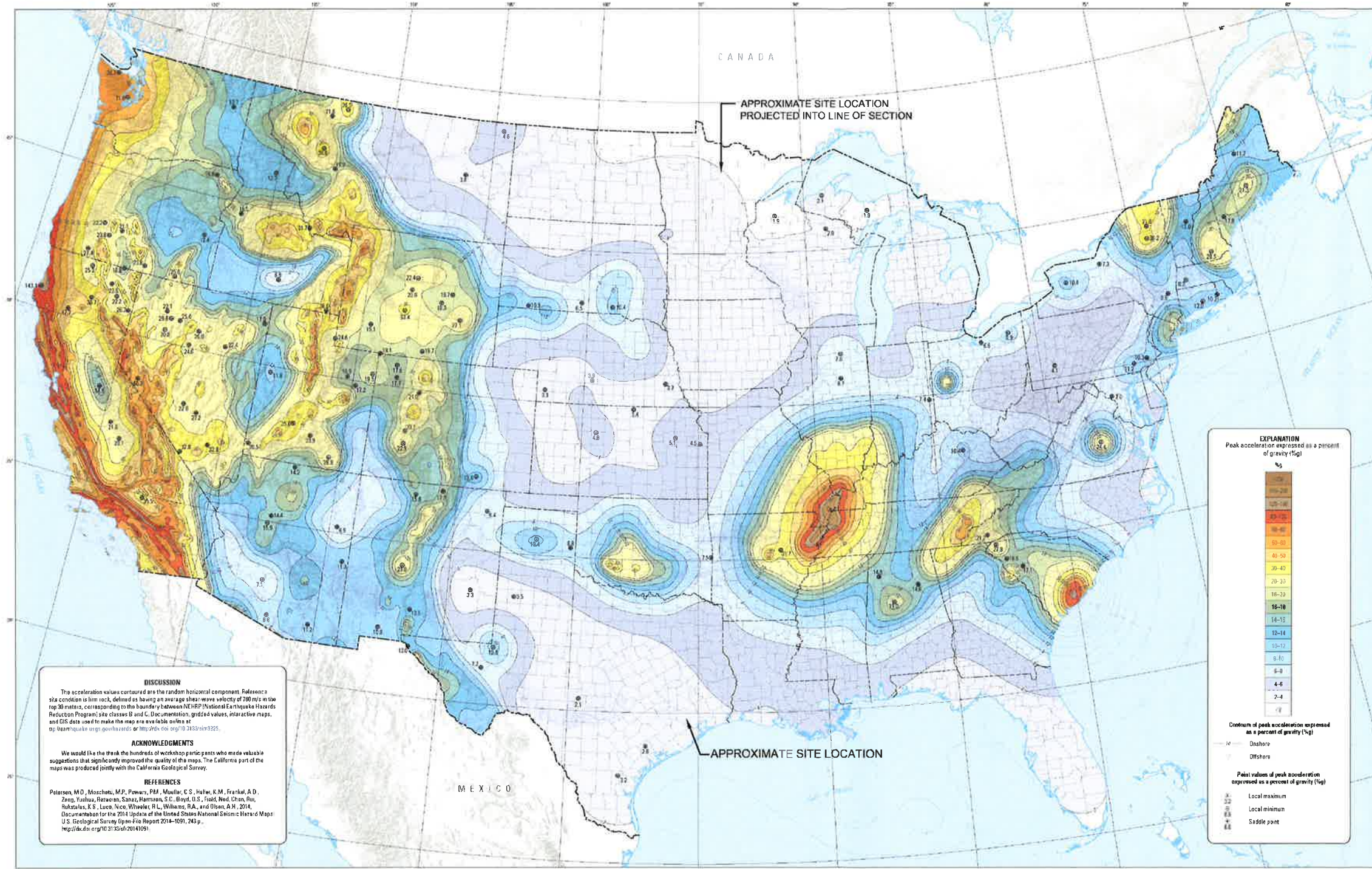
HAWTHORN PARK LANDFILL APPENDIX III-4D

Seismic Impact Zone Map.....	III-4D-1
Earthquake Hazards Technical Q&A.....	III-4D-2
Location of Oil and Gas Producing Wells.....	III-4D-3
Railroad Commission Reports.....	III-4D-4 through III-4D-20



Biggs & Mathews Environmental, Inc.
Firm Registration No. 50222

2/9/2021



- NOTES:
1. THE FACILITY LIES IN AN AREA WHERE THE PGA, WITH A 2% PROBABILITY OF BEING EXCEEDED IN 50 YEARS, IS LESS THAN 10% OF GRAVITY (LESS THAN 0.1g). THIS IS EQUIVALENT TO A 10% PROBABILITY IN 250 YEARS. A PRINTOUT OF THE USGS FAQ RESPONSE CONFIRMING THE EQUIVALENCY IS INCLUDED IN THIS SUBMITTAL ON THE NEXT PAGE.
 2. THE MAP PRESENTED HERE IS INTENDED TO ONLY DEPICT THE IMPACT ZONE IN WHICH THE FACILITY LIES. PLEASE REFER TO PETERSON, M.D., ET AL., 2015, SEISMIC HAZARD MAPS FOR THE CONTERMINOUS UNITED STATES, 2014: U.S. GEOLOGICAL SURVEY SCIENTIFIC INVESTIGATION MAP 3325, 6 SHEETS, SCALE 1:7,000,000. [HTTPS://PUBS.USGS.GOV/SIM3325_SHEET2.PDF](https://pubs.usgs.gov/sim3325_sheet2.pdf) FOR A FULLY LEGIBLE VERSION.



Biggs & Mathews Environmental, Inc.
Firm Registration No. 50222

SEISMIC IMPACT ZONE MAP

**USA WASTE OF TEXAS LANDFILLS, INC.
HAWTHORN PARK LANDFILL
PERMIT AMENDMENT**



**BIGGS & MATHEWS
ENVIRONMENTAL
CONSULTING ENGINEERS**
MANSFIELD
DALLAS WICHITA FALLS
817-563-1144

Seismic-Hazard Maps for the Conterminous United States, 2014
Peak Horizontal Acceleration with 2 Percent Probability of Exceedance in 50 Years

By
Mark D. Petersen,¹ Morgan P. Moschetti,¹ Peter M. Powers,¹ Charles S. Mueller,¹ Kathleen M. Haller,¹ Arthur D. Frankel,¹ Yuehua Zeng,¹ Sanaz Rezaeian,¹ Stephen C. Harmsen,¹ Oliver S. Boyd,¹ Edward H. Field,¹ Rui Chen,² Nicolas Luco,¹ Russell L. Wheeler,¹ Robert A. Williams,¹ Anna H. Olsen,¹ and Kenneth S. Rukstales¹
2015

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS					DSN: ESF	DATE: 1/2021	FIGURE III-4D-1
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY	
					JMS	DWG: pdf_lmp.dwg	

C:\Users\janderson\AppData\Roaming\Carlson\Carlson Software\Carlson2020\CAD9_X64\USER..._tmp.dwg Layout: Layout1 User: janderson

The seismic hazard map is for ground motions having a 2% probability of exceedance in 50 years. Are those values the same as those for 10% in 250?

Yes, basically. This conclusion will be illustrated by using an approximate rule-of-thumb for calculating Return Period (RP).

A typical seismic hazard map may have the title, "Ground motions having 90 percent probability of not being exceeded in 50 years." The 90 percent is a "non-exceedance probability"; the 50 years is an "exposure time." An equivalent alternative title for the same map would be, "Ground motions having 10 percent probability of being exceeded in 50 years." A typical shorthand to describe these ground motions is to say that they are 475-year return-period ground motions. This means the same as saying that these ground motions have an annual probability of occurrence of 1/475 per year. "Return period" is thus just the inverse of the annual probability of occurrence (of getting an exceedance of that ground motion).

To get an approximate value of the return period, RP, given the exposure time, T, and exceedance probability, $r = 1 - \text{non-exceedance probability, NEP}$, (expressed as a decimal, rather than a percent), calculate:

$RP = T / r^*$ Where $r^* = r(1 + 0.5r)$. r^* is an approximation to the value $-\log_e(\text{NEP})$.
 In the above case, where $r = 0.10$, $r^* = 0.105$ which is approximately $-\log_e(0.90) = 0.10536$
 Thus, approximately, when $r = 0.10$, $RP = T / 0.105$

Consider the following table:

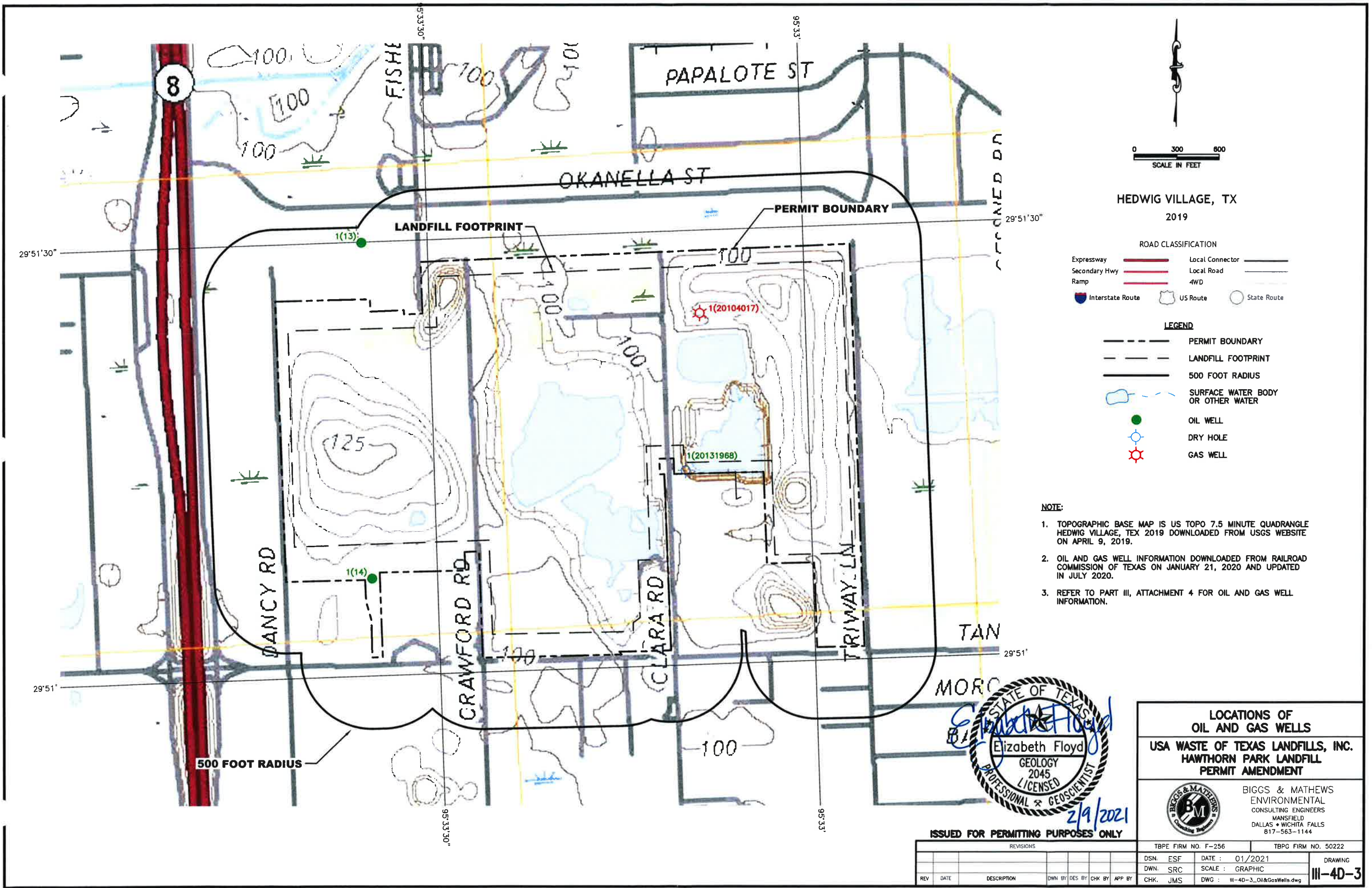
NEP	T	r	r*	Rule of Thumb Calculation	Exact RP
0.90	50	0.10	0.105	50/0.105	476.2
0.90	100	0.10	0.105	100/0.105	952.4
0.90	250	0.10	0.105	250/0.105	2381.0

In this table, the exceedance probability is constant for different exposure times. Compare the results of the above table with those shown below, all for the same exposure time, with differing exceedance probabilities.

NEP	T	r	r*	Rule of Thumb Calculation	Exact RP
0.90	50	0.10	0.105	50/0.105	476.2
0.95	50	0.05	0.05125	50/0.05125	975.6
0.98	50	0.02	0.0202	50/0.0202	2475.2

Comparison of the last entry in each table allows us to see that ground motion values having a 2% probability of exceedance in 50 years should be approximately the same as those having 10% probability of being exceeded in 250 years: The annual exceedance probabilities differ by about 4%. Corresponding ground motions should differ by 2% or less in the EUS and 1 percent or less in the WUS, based upon typical relations between ground motion and return period.

J:\101\24\102\ATT E\III-4D-3_Oil&GasWells.dwg Layout: layout 1 User: SCundiff

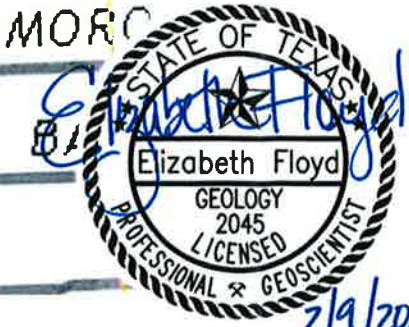


HEDWIG VILLAGE, TX
2019

- ROAD CLASSIFICATION**
- Expressway
 - Secondary Hwy
 - Ramp
 - Interstate Route
 - Local Connector
 - Local Road
 - 4WD
 - US Route
 - State Route

- LEGEND**
- PERMIT BOUNDARY
 - LANDFILL FOOTPRINT
 - 500 FOOT RADIUS
 - SURFACE WATER BODY OR OTHER WATER
 - OIL WELL
 - DRY HOLE
 - GAS WELL

- NOTE:**
- TOPOGRAPHIC BASE MAP IS US TOPO 7.5 MINUTE QUADRANGLE HEDWIG VILLAGE, TEX 2019 DOWNLOADED FROM USGS WEBSITE ON APRIL 9, 2019.
 - OIL AND GAS WELL INFORMATION DOWNLOADED FROM RAILROAD COMMISSION OF TEXAS ON JANUARY 21, 2020 AND UPDATED IN JULY 2020.
 - REFER TO PART III, ATTACHMENT 4 FOR OIL AND GAS WELL INFORMATION.



LOCATIONS OF OIL AND GAS WELLS
USA WASTE OF TEXAS LANDFILLS, INC.
HAWTHORN PARK LANDFILL
PERMIT AMENDMENT

BIGGS & MATHEWS
ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD
DALLAS • WICHITA FALLS
817-563-1144

ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS						TBPE FIRM NO. F-256	TBPG FIRM NO. 50222
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY	DRAWING
							III-4D-3

DSN: ESF DATE: 01/2021
DWN: SRC SCALE: GRAPHIC
CHK: JMS DWG: III-4D-3_Oil&GasWells.dwg

GIS Identify Results - Well Location Attributes

Number of identify results: 1

Result #1	
API	20131968
GIS WELL NUMBER	1
GIS SYMBOL DESCRIPTION	Dry Hole
GIS LOCATION SOURCE	Commission`s hardcopy map
GIS LAT (NAD27)	29.853575
GIS LONG (NAD27)	-95.552497
GIS LAT (NAD83)	29.853800
GIS LONG (NAD83)	-95.552717

OPERATOR/WELLBORE	
WELLBORE STATUS	DRY
LAST PERMIT ISSUED	284849
LAST PERMIT OPERATOR NUMBER	319200
LAST PERMIT OPERATOR	GOULD OIL INC.
LAST PERMIT LEASE NAME	B.S.I. - WESTERN
TOTAL DEPTH	0
SURFACE LOCATION	Land
ABSTRACT	1185
SURVEY	F. FRIEDENHAUS
BLOCK	
SECTION	
DISTANCE 1	1530
DIRECTION 1	NL
DISTANCE 2	1200
DIRECTION 2	EL
PLUGGING RECORD	
DATE PLUGGED	11/08/1985
PLUG DEPTH	7916
PLUGGING OPERATOR	GOULD OIL, INC.
PLUGGED LEASE	B.S.I.-WESTERN



Form W-1: Review

Status # 284849 API # 201-31968	OP # 319200 - GOULD OIL INC. Approved , Issued: 09/16/1985 , Filed: Hardcopy	B.S.I. - WESTERN - Well # 1 03 - HARRIS County	New Drill Vertical
NEAREST WELL COMMENT: NA (08/22/1985 12:00:00 AM)			

Status:

[Back to Public Query Search Results](#)

Completion Information			
Well Status Code	Spud Date	Drilling Completed	Surface Casing Date
D - Dry hole	09/27/1985	11/08/1985	

General / Location Information							
Basic Information:							
Filing Purpose	Wellbore Profiles	Lease Name	Well #	SWR	Total Depth	Horizontal Wellbore	Stacked Lateral Parent Well DP #
New Drill	Vertical	B.S.I. - WESTERN	1		7900		

Surface Location Information:				
API #	Distance from Nearest Town	Direction from Nearest Town	Nearest Town	Surface Location Type
201-31968	1.0 miles	NW	HOUSTON	Land

Survey/Legal Location Information:				
Section	Block	Survey	Abstract #	County
		F. FRIEDENHAUS	1185	HARRIS

Township	League	Labor	Porcion	Share	Tract	Lot

Perpendicular surface location from two nearest designated reference lines:

Perpendiculars	Distance	Direction	Distance	Direction
Survey Lines	1530.0 feet	from the NL line and	1200.0 feet	from the EL line

Permit Restrictions:											
Code	Description										
30	REGULAR PROVIDED THIS WELL IS NEVER COMPLETED IN VIOLATION OF APPLICABLE SPECIAL FIELD OR STATEWIDE SPACING RULES.										
30	WILDCAT ABOVE 07900 FEET.										
30	REGULAR PROVIDED THIS WELL IS NEVER DRILLED DEEPER THAN 7900 FEET.										
Fields											
District	Field Name	Field #	Completion Depth	Lease Name	Well #	Well Type	Acres	Distance to nearest well	Distance to nearest Lease Line	SWR	Pooled/Unitized
03	WILDCAT Primary Field	00006001	7900	B.S.I. - WESTERN	1	Oil Well	40.0				N
		Perpendiculars	Distance	Direction		Distance	Direction				
		Surface Lease Lines	590.0 feet	from the NL line and		650.0 feet	from the EL line				
Comments											
Remark			Date Entered			Entered By					
NEAREST WELL COMMENT: NA			08/22/1985 12:00:00 AM			SYSTEM					
Attachments											
Attachment Type			File Path			Associated Fields and/or Plats					

Return each W-1 with \$100.00 for field check or money order payable to the State Treasurer of Texas. Address in Houston, Texas 77271.
 Railroad Commission of Texas
 P.O. Box 13887, Capitol Station
 Austin, Texas 78711

Form W-1
Rev. 6/1/83
JOB 000

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Application for Permit to Drill, Dracym, Plug Back, or Re Enter

Read Instructions on Back

File a copy of BS-1 and paid to RRC District Office
 Purpose of filing (check appropriate boxes)

New

Reopen (after closing)

Directional Well

Re-drill

Plug Back

Re Enter

Approved Permit (enter permit no. or title & explain title in Remarks)

Operator's Name (as shown on Form P-5 Organization Report)
WILD CAT OIL, INC.

Well No. (if different from Form P-5)
3

Address (including city and zip code)
**P. O. BOX 3660
 WICHTA, TX 76208**

Well Name (if different from Form P-5)
B.S. I. - WESTERN

County
HARRIS

Well Depth
7900'

Section
118

Survey
F. FRIEDENHAUS

Acres (Net)
1185

008744

HOUSTON

Alphabet No. A **1185**

11. Indicate from prospect, location to be drilled or re-drilled (use 15° or 30° or 45° or 90° or 180° or 270° or 360°)
 12. This well is to be located in the NE1/4 of Section 118, Township 12S, Range 10E, which is the nearest town to the center of the well site.
 13. FIELD NAME (clearly as shown on RRC permit or lease) List all established and adjacent owners of such quarter, acreage, and additional Form W-1's as required in the lease terms. (See case per file)
**WILDCAT (ABOVE)
 6000'**

14. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

15. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

16. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

17. Number of drilling units for this well (if different from Form P-5)
1

18. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

19. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

20. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

21. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

22. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

23. This acreage assigned to this well (other than the acreage in this lease) to be drilled or re-drilled (if any)
NO

24. Is this a re-drill of a well? (Check appropriate box)
 Leave Well
 Shut In Well
 Plug Back
 Re-enter Well
 Re-drill Well

25. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

26. Does the well bore have the right to develop the minerals under any right of way that crosses or is contiguous to this tract? (Check appropriate box)
 Yes
 No

27. Attach Form P-12 and certified plat.
 Yes
 No

28. Does the well bore have the right to develop the minerals under any right of way that crosses or is contiguous to this tract? (Check appropriate box)
 Yes
 No

29. Does the well bore have the right to develop the minerals under any right of way that crosses or is contiguous to this tract? (Check appropriate box)
 Yes
 No

30. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

31. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

32. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

33. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

34. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

35. Is this well bore subject to Statewide Rule 70, this being within area? (Check appropriate box)
 Yes
 No

Signature
Dale P. Jernett

Name and title of operator's representative
DALE P. JERNETT, VICE-PRESIDENT

316-682-5523

Date
AUGUST 15, 1985

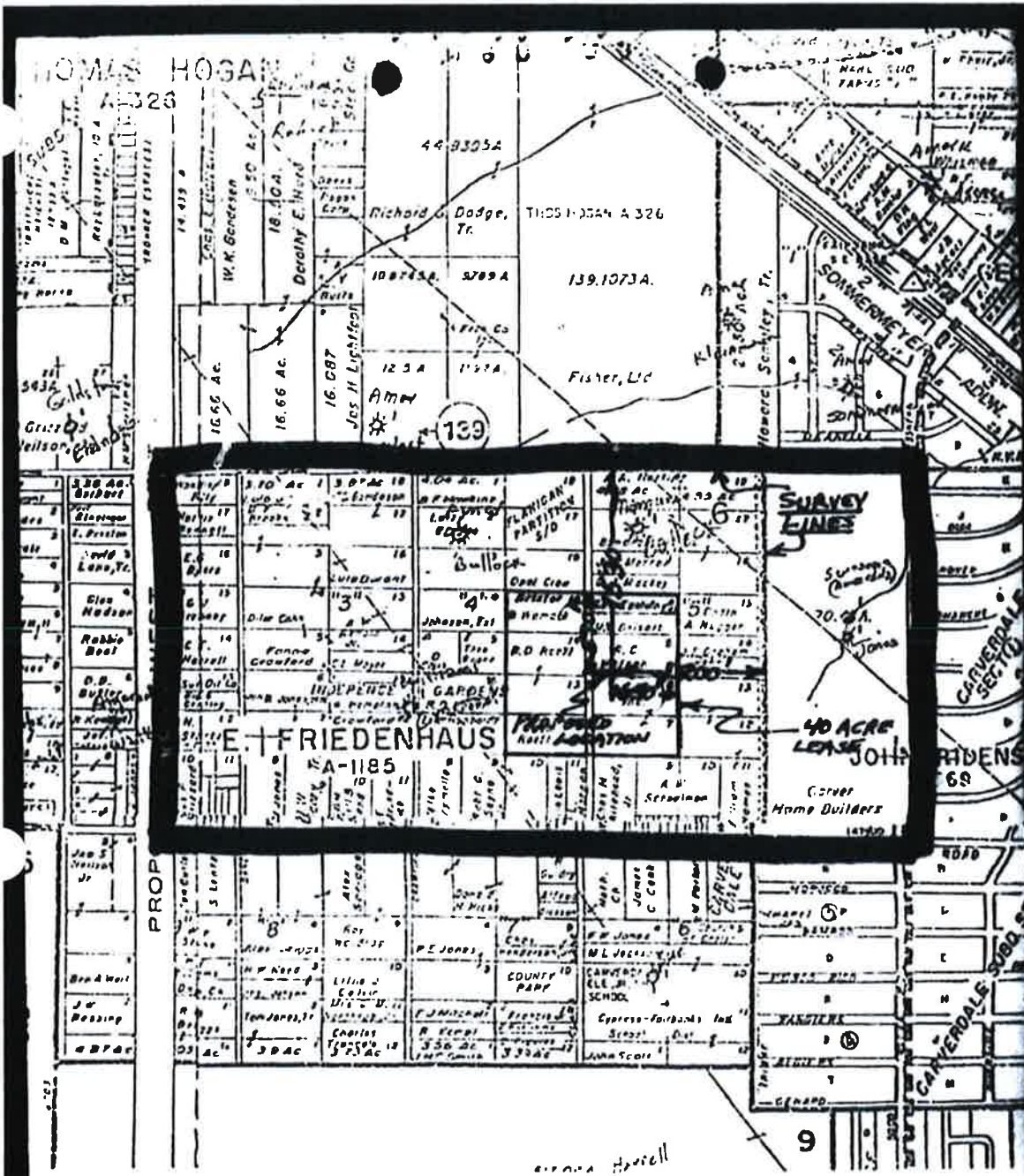
Area Code
316-682-5523

Number
293463

Remarks

Remarks

Remarks



DATE: AUGUST 15, 1985 SCALE: 1" = 1000' G.R. ELEV:

NAME: GOULD OIL, INC. - #1 B.S.I. - WESTERN

LOCATION: F. FRIEDENHAUS SURVEY, A-1185, HARRIS COUNTY, TEXAS

Dale P. Jewett
 DALE P. JEWETT
 REGISTERED PROFESSIONAL ENGINEER
 NUMBER 47925 - TEXAS



42-201-31968

FILE IN DUPLICATE WITH DISTRICT OFFICE OF DISTRICT IN WHICH
WELL IS LOCATED WITHIN THIRTY DAYS AFTER PLUGGING

1. FIELD NAME	2. OPERATOR	3. WELL NUMBER
WILDCAT	B.S.I. - WESTERN	03
GOULD OIL, INC.	GOULD OIL, INC.	1
P. O. BOX 3640, WICHITA, KS 67206	590 East Loop NORTH 650	HARRIS
	EAST Loop with P.S.I. - WESTERN	9/16/85
	1 MILE NW OF HOUSTON	28-349
		9/26/85
		10/8/85
		11/8/85

CEMENTING TO PLUG AND ABANDON DATA	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
19. Cementing Date	11/7/85	11/7/85	11/8/85	11/8/85				
20. Size of Hole or Pipe in which Plug Placed (inches)	5 1/2" csg	5 1/2" csg	7 7/8" csg	8 5/8" csg				
21. Depth to Bottom of Tubing or Drill Pipe (ft)	7305'	6581'	1686'	15'				
22. Sacks of Cement Used (each plug)	25	25	40	10				
23. Slurry Volume Pumped (cu ft)	27	27	47	12				
24. Calculated Top of Plug (ft)	7107'	6383'	1566'	3'				
25. Measure to Top of Plug (ft)	16.4	16.4	15.6	15.6				
26. Slurry Class	CLASSH	CLASSH	CLASSH	CLASSH				

NOTE: THIS INFORMATION
PROVIDED ON FORM
W-15 SUBMITTED
ON 11/14/85

27. CASING AND TUBING RECORD AFTER PLUGGING	SIZE	WT. (LB/FT)	PUT IN WELL (ft)	LEFT IN WELL (ft)	OLE SIZE (in)
5 1/2"	17.5	1450	1650	770	12 1/4
5 1/2"	15.5	790	790	616	7 7/8
5 1/2"	14	480	480	480	7 7/8
5 1/2"	15.5	860	860	860	7 7/8

28. LIST ALL OPEN HOLE AND DR PERFORATED INTERVALS	FROM	TO	FROM	TO
	7303	7305		
	6579	6581		

I have knowledge that the information furnished on this report is true and correct to the best of my knowledge and belief, and that I am a duly qualified and licensed operator.

(SIGNATURE PROVIDED ON FORM W-15, SEE NOTE ABOVE)

Signature of Cementor or Authorized Representative

THE WESTERN COMPANY
Name of Cementing Company

CERTIFICATE

I declare under penalties prescribed in Article 14, Texas Penal Code, that the information on this report was prepared by me or under my direct supervision, and that the same is true and correct, and complete, to the best of my knowledge.

Signature of Representative of Company

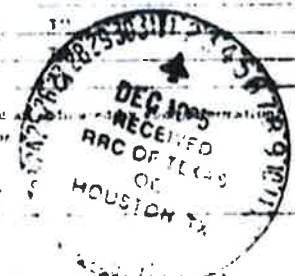
VICE-PRESIDENT NOVEMBER 26, 1985 316 682-5523

TITLE DATE PHONE A/C NUMBER

SIGNATURE REPRESENTATIVE OF RAILROAD COMMISSION

201 31968

1530 NCL 1200 FL



13. Was Well Cased with Mud (Enter Yes or No) Yes No. How was Mud Applied: **PUMPED THROUGH TUBING** Mud Weight: 9.5 LB/GAL

14. Total Depth: **7916** Other Fresh Water Zones by T.D.B.M.: TOP _____ BOTTOM _____ 15. Have all Abandoned Wells in this Lease been Plugged according to R.R.C. Rules? Yes No

Depth of Deepest Fresh Water: **1600** 16. Explain: _____

17. Name and Address of Cementing or Service Company who cased and pumped cement plugs in this well: **THE WESTERN COMPANY, LIBERTY, TEXAS** Date R.R.C. District Office notified of plugging: **11/76/85**

18. Name and Address of Surface Owner of Well Site and Operators of Offsite Producing Leases:
B.S.I. - WESTERN CONTRACTORS, 6602 GUN ROAD, HOUSTON, TX 77040 (SURFACE OWNER)
NO OFFSET PRODUCING LEASES

19. Was Notice Given Before Plugging in Each of the Above? **YES**

FILL IN BELOW FOR DRY HOLES ONLY

20. For Dry Holes, this Form must be accompanied by either a Driller's Electric, Radiometric, or Acoustical Sonic Log or such log must be released to a Commercial Log Service.

FORM L-1 ENCLOSED

Log Attached Log released to _____ Date _____

Type Log: Driller's Electric Radiometric Acoustical Sonic

21. Date FORM P-1 (Special Clearance) Filed? **NO**

22. Amount of Oil produced prior to plugging: **N/A** bbbls*

* File FORM P-1, Oil Production Report for month this oil was produced.

R.R.C. USE ONLY

Nearest Field _____

REMARKS _____

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

RECEIVED

OCT 17 1985

Form W-12
11-1-71

INCLINATION REPORT

(One Copy Must Be Filed With Each Completion Report)

1 FIELD NAME (see per NRC Records or Wildcat)	2 LEASE NAME	8 NRC District
WILDCAT	BSI-Western	03
3 OPERATOR		9 NRC Lease Number (Oil completions only)
Gould Oil, Inc.		Well Number
4 ADDRESS		1
P. O. Box 9640, Wichita, Kansas 67208		9 NRC Identification Number (Gas completions only)
5 LOCATION (Section, Block, and Survey)		10 County
1530' FNL & 1200' WEL, E. Friedenhaus Sur., A-1165		Harris

RECORD OF INCLINATION

11 Measured Depth (feet)	12 Course Length (feet)	13 Angle of Inclination (Degrees)	14 Displacement per Hundred Feet (Size of Angle X 100)	15 Course Displacement (feet)	16 Accumulative Displacement (feet)
502	502	1/4°	.44	2.21	2.21
1005	503	3/4°	1.31	6.59	8.80
1509	504	3/4°	1.31	6.60	15.40
1651	142	1/4°	.44	0.62	16.02
2171	520	1/4°	.44	2.29	18.31
2675	504	1/2°	.87	4.38	22.69
3180	505	1/2°	.87	4.39	27.08
3686	506	1/2°	.87	4.40	31.48
4006	320	3/4°	1.32	4.19	35.67
4505	499	1/2°	.87	4.34	40.01
5010	505	3/4°	1.31	6.61	46.62
5515	505	1	1.75	8.84	55.46
5899	384	1-1/4°	2.18	8.37	63.83
6366	467	1-	3.05	14.24	78.07
6732	366	1-3/4°	3.05	11.16	89.73
7218	486	1-1/4°	2.18	10.59	99.82

If additional space is needed, use the reverse side of this form.

17 Is any information shown on the reverse side of this form? Yes No

18 Accumulative total displacement of well bore at total depth of 7916 feet 109.82 feet

19 Inclination measurements were made in Tubing Casing Open hole Drill Pipe

20 Distance from surface location of well to the nearest lease line 590 feet.

21 Minimum distance to lease line as prescribed by field rules 467 feet.

22 Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? NO

(If the answer to the above question is "Yes," attach written explanation of the circumstances.)

INCLINATION DATA CERTIFICATION

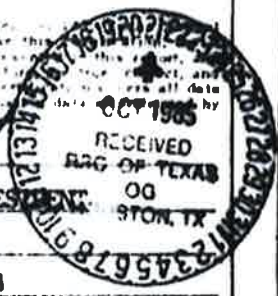
I, the undersigned, hereby certify that the data shown on this report were obtained from the records of the well logs and other data available to me at the time of the completion of this report.

Chester B. Benge, Jr.
Signature of Authorized Representative
Chester B. Benge, Jr., Pres.
Name of Person and Title (type or print)
BIG "6" DRILLING COMPANY
Name of Company
Telephone 713 783-2300
Area Code

OPERATOR CERTIFICATION

I, the undersigned, hereby certify that the data shown on this report were obtained from the records of the well logs and other data available to me at the time of the completion of this report.

Dale P. Jewett
Signature of Authorized Representative
DALE P. JEWETT, VICE-PRESIDENT
Name of Person and Title (type or print)
GOULD OIL, INC.
Telephone 316 682-5523
Area Code



Railroad Commission Use Only

Approved By _____ Title _____ Date _____

* Designates items certified by company that conducted the inclination surveys

RECORD OF INCLINATION (Continued from reverse side)

*11 Measured Depth (feet)	12 Course Length (Hundreds of feet)	*13 Angle of Inclination (Degrees)	14 Displacement per Hundred Feet (Size of Angle X 100)	15 Course Displacement (feet)	16 Accumulative Displacement (feet)
7413	195	0	1.75	3.41	103.23
7916	503	3/4 ^o	1.31	6.59	109.82

If additional space is needed, attach separate sheet and check here _____
REMARKS _____

- INSTRUCTIONS -

An inclination survey made by persons or concerns approved by the Commission shall be filed on a form prescribed by the Commission for each well drilled or deepened with rotary tools or when, as a result of any operation, the course of the well is changed. No inclination survey is required on wells that are drilled and completed as dry holes that are plugged and abandoned (Inclination surveys are required on re-entry of abandoned wells.) Inclination surveys must be made in accordance with the provisions of Statewide Rule 11

This report shall be filed in the District Office of the Commission for the district in which the well is drilled, by attaching one copy to each appropriate completion for the well (except Plugging Report)

The Commission may require the submittal of the original charts, graphs or discs, resulting from the surveys

Complete Fill in shaded areas
Operator Fill in other items

Form W-15
Cementing Report
Rev. 4-1-83
483-045

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Operator Name As Shown GOULD OIL, INC.	Well No. 319200	County of Well Site HARRIS
Field Name With or Without a Street Name UTLDCAT	Ac. No. 42-201-31968	Tracing Permit No. 284849
Lease Name B.S.I. - WESTERN	Well No. 1	

CASING CEMENTING DATA	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
			Single String	Multiple Parallel Strings	Time	Show
12. Cementing Date	9-27-85					
13. *Drilled bit size	12 1/2					
*Ex. Wash bit size (operator)	10"					
14. Size of casing run in	8 5/8"					
15. Log offset ft.						
16. Cementing depth ft.	1650					
17. Cement volume (operator)	10					
18. Cement volume (operator)	12					
1st Slurry	19. All cement used	480				
	Class	Mod HLC				
	Additives	3# Salt				
2nd Slurry	No. of sacks	150				
	Class	A				
	Additives	NEat				
3rd Slurry	No. of sacks					
	Class					
	Additives					
1st	20. Slurry pumped	1046.4				
	Volume (cu ft)					
2nd	Height (ft)	2530				
	Volume (cu ft)	177				
3rd	Height (ft)	428				
	Volume (cu ft)					
Total	Volume (cu ft)	1223.4				
	Height (ft)	2958				
21. Was cement circulated to ground surface for bottom of central outside casing?	Yes					
22. Remarks						



12 1985

OVER

CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
23. Cementing date								
24. Size of hole or pipe plugged (in)								
25. Depth to bottom of tubing or drill pipe (ft)								
26. Sacks of cement used (each plug)								
27. Slurry volume pumped (cu ft)								
28. Calculated top of plug (ft)								
29. Measured top of plug (ft) (agent)								
30. Slurry wt (lbs/gal)								
31. Type cement								

CEMENTING CERTIFICATE I declare under penalties prescribed in Section 481 of the Texas Natural Resources Code that I am authorized to make this certification that the cementing or casing job or the cementing or cement plug job as shown in the report was performed by me or under my supervision and that the cementing data and facts presented in this report are true and complete to the best of my knowledge. This certification covers cementing data only.

Richard Thorpe Cementer **Halliburton Services**
 Name and title of cementer's representative Cementing Company Signature *Richard Thorpe*
PO BOX 1172 **Fresno, Texas 77545** **713-431-2531**
 Address City State Zip Code Tel. Area Code Number Date mo day yr

DALE P. JEWETT **VICE - PRESIDENT**
 Type or printed name of operator's representative Title Signature *Dale Jewett*
P. O. BOX 8640 **WICHITA, KS 67208** **316-682-5523** **10-15-85**
 Address City State Zip Code Tel. Area Code Number Date mo day yr

Instructions to Form W-15, Cementing Report

- IMPORTANT:** Operators of offshore operations must file Form W-15 with the appropriate State or Federal Water Pollution Control Agency (WPCA) or the appropriate State or Federal Water Pollution Control Agency (WPCA) or the appropriate State or Federal Water Pollution Control Agency (WPCA).
- A. What to file:** An operator must file a cementing report on Form W-15 for each cementing job. If a well is plugged with multiple cement plugs, separate Form W-15s should be filed for each plug.
- An initial flow gradient test log or Form W-2 or G-1 is required for all wells in special fields.
 - Form W-4 Application for Multiple Completion is required for multiple completion wells.
 - Form W-3 Logging Record is required for all logging wells.
- B. Where to file:** The appropriate WPCA or Federal Water Pollution Control Agency (WPCA) should be contacted.
- C. Surface casing:** An operator must use and certify that the casing is of suitable quality water service. If water service casing is used, the operator must certify that the casing meets the applicable rules of the appropriate WPCA or Federal Water Pollution Control Agency (WPCA). If the casing is not water service, the operator must certify that the casing meets the applicable rules of the appropriate WPCA or Federal Water Pollution Control Agency (WPCA).
- D. Centralizers:** Non-elevated holes are required to use centralizers. The operator must certify that the centralizers used meet API specifications.
- E. Exceptions and alternative casing programs:** If an operator uses a casing program that is not listed in the instructions, the operator must state the reason for the exception and certify that the casing and cementing program meets the protection requirements for casing and cementing operations.
- F. Intermediate and production casing:** The operator must certify that the casing and cementing program meets the protection requirements for casing and cementing operations.
- G. Plugging and abandoning:** For offshore operations, the operator must certify that the casing and cementing program meets the protection requirements for casing and cementing operations. For onshore operations, the operator must certify that the casing and cementing program meets the protection requirements for casing and cementing operations.
- To plug and abandon a well, an operator must use only cementers approved by the Director of Field Operations. Cementing companies serving onshore operations can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with the Commission's regulations.

Cemented: Fill in shaded areas
Operator: Fill in other items

OCT 17 1965

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Form W-15
Cementing Report
Rev. 4-1-63
403-049

1. Operator Name (As shown on well log)	2. Well No.
Gould Oil	319200
3. Field Name (Block or location as shown on well log)	4. Well No.
WILDCAT	03
5. Lease Name	6. Drilling Permit No.
B.S.I. Western	42-201-31968
	7. Well No.
	284849
	X 1

	CASING CEMENTING DATA	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
	12. Cementing Date			10-8-65			
	13. Drilled hole size			7 7/8"			
	of 1% wash or hole enlargement			10%			
	14. Size of casing (in. O.D.)			5 1/2"			
	15. Top of liner (ft.)			----			
	16. Setting depth (ft.)			7915'			
	17. Number of centralizers used			18			
	18. Hts. waiting on cement (see drill cut)			N.A.			
1st Shury	19. API cement used	No of sacks ▶		75			
		Class ▶		PSL			
		Additives ▶		3 Salt + .3 WP-15			
2nd Shury		No of sacks ▶		375			
		Class ▶		H			
		Additives ▶		10% Salt + .25% WP-15			
3rd Shury		No of sacks ▶					
		Class ▶					
		Additives ▶					
1st	20. Slurry bumped	Volume (cu. ft.) ▶		141			
		Height (ft.) ▶		910			
2nd		Volume (cu. ft.) ▶		450			
		Height (ft.) ▶		2593			
3rd		Volume (cu. ft.) ▶					
		Height (ft.) ▶					
Total		Volume (cu. ft.) ▶		591			
		Height (ft.) ▶		3403			
	21. Was cement circulated in ground surface (at bottom of collar) outside casing?			NO			
	22. Remarks	Over displaced 3 Bbls., did not bump plug.					



CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
23. Cementing date								
24. Size of hole or pipe plugged (in)								
25. Depth to bottom of tubing or drill pipe (ft)								
26. Bags of cement used for plug								
27. Slurry volume pumped (cu ft)								
28. Calculated top of plug (ft)								
29. Measured top of plug (ft)								
30. Slurry wt. (lb/gal)								
31. Type cement								

CEMENTER'S CERTIFICATE: I declare under penalty of perjury that the data on this Texas Water Resources Code Form W-15 was obtained and made by me or under my supervision and that the cementing data and facts presented on both sides of this form are true, correct, and not perjured. I declare under penalty of perjury that this certification covers cementing only.

Cecil Tanner, Serv. Sup., The Western Co. Cecil Tanner
 Name and title of cementer's representative Signature
 P. O. Box 841, Liberty, Texas 77575 (409) 336-7218 10-8-95
 Address City State Zip Code Tel. Area Code Number Date mo day yr

OPERATOR'S CERTIFICATE: I declare under penalty of perjury that the data on this Texas Water Resources Code Form W-15 was obtained and made by me or under my supervision and that the data and facts presented on both sides of this form are true, correct, and not perjured. I declare under penalty of perjury that this certification covers cementing only.

DALE P. JEWETT, VICE-PRESIDENT Dale P Jewett
 Type or printed name of operator's representative Title Signature
 P. O. BOX 8640, WICHITA, KS 67208 316 682-5523 10 18 85
 Address City State Zip Code Tel. Area Code Number Date mo day yr

Instructions to Form W-15, Cementing Report

- IMPORTANT:** Operators and cementing companies shall comply with the requirements of the Commission's Statewide Rules & Water Protection - (1) Casing Cementing, Drilling and Completion and (2) W-15 Casing and offshore operations. See the requirements of Rule 101.
 - A. What to file:** An operator shall file a completed Form W-15 with the appropriate filing agency. The cementing of different casing strings in a well by an operator shall be reported on the Form W-15 and be filed with the following:
 - An initial oil or gas completion report, Form W-2 or G-1 as required by Statewide or special conditions.
 - Form W-4 Application for Multiple Completion of a Well, when appropriate, as required by W-4.
 - Form W-3 Plugging Report, unless the W-15 signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
 - B. Where to file:** The appropriate Commission District Office for the county in which the well is located.
 - C. Surface casing:** An operator shall set a cement plug on the surface (as defined by the Texas Department of Water Resources, Austin) before drilling a well in any field or area in which the requirements are not specified in the applicable rules. An operator must obtain approval from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
 - D. Centralizers:** Surface casing must be centralized to insure the seal and the well integrity. A centralizer must be used through usable quality water. In nonusable holes, a centralizer must be placed every 100 feet from the cement shoe to the ground surface. All centralizers must meet API specifications.
 - E. Exceptions and alternative casing programs:** The Commission may grant an exception to the requirements of this rule. Before filing a written application, an operator must state the reason for the exception and the state program for casing and cementing in such the protection depth for strata containing usable quality water. The District Office may approve an exception for proposed projects. An operator must obtain approval of any exception before beginning casing and cementing operations.
 - F. Intermediate and production casing:** For specifications for cement, operators should consult Statewide Rules 101, 102 and 104.
 - G. Plugging and abandoning:** Cement plugs must be placed in the well as required by Statewide Rule 101. The top of the cement plug shall be at least 10 feet below the ground surface. All cement plugs except the top plug must have sufficient slurry volume to fill 100 feet of hole plus 100 feet of hole plus 100 feet of depth to the ground surface to the bottom of the plug.
- To plug and abandon a well operators must use the cementures approved by the Director of the Department of Water Resources. Operators or operators' representatives can qualify as approved cementing operators by submitting their resumes to the Commission and following the Commission's rules and regulations.

Cementing: Fill in shaded areas
Operator: Fill in other items

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Form W-15
Cementing Report
Rev. 4-1-63
4D-005

1. Operator's Name (As shown on well log) or name of company	2. Well No.	3. Well Depth	4. Well Status
Gould Oil	319200	03	Harris
5. Field Name (With date or exactly as shown on log) or well name	6. Well No.	7. Well Depth	8. Well Status
WILDCAT	42	201-31968	284849
9. Lease Name	10. Well No.	11. Well Depth	12. Well Status
BSI Western			1

CASING CEMENTING DATA	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
			Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date						
13. Drilled hole size						
14. Size of casing in OD						
15. Top of liner (ft)						
16. Setting depth (ft)						
17. Number of centralizers used						
18. Time waiting for cement before setting						
1st Shury	19. API cement used: No. of sacks					
	Class					
	Additives					
2nd Shury	No. of sacks					
	Class					
	Additives					
3rd Shury	No. of sacks					
	Class					
	Additives					
1st	20. Slurry pumped: Volume (cu ft)					
	Height (ft)					
2nd	Volume (cu ft)					
	Height (ft)					
3rd	Volume (cu ft)					
	Height (ft)					
Total	Volume (cu ft)					
	Height (ft)					
21. Was cement circulated in ground surface (or bottom of collar) outside casing?						
22. Remarks						



Plugging cementing on this report only.
Casing cementing has been provided on previous reports

CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
23. Cementing date	11-7-85	11-7-85	11-3-85	11-8-85				
24. Size of hole or pipe plugged in	5 1/2" 15.5"	5 1/2" 15.5"	7 7/8"	8 5/8" O.D.				
25. Depth to bottom of tubing or drill pipe ft.	7305	6581	1686	15				
26. Bags of cement used (each plug)	25	25	40	10				
27. Slurry volume pumped (cu. ft.)	26.5	26.5	47.2	11.8				
28. Calculated top of plug (ft.)	7107	6383	1566	Surface				
29. Measured top of plug (ft.)				Surface				
30. Slurry wt. (lb./gal)	16.4	16.4	15.6	15.6				
31. Type cement	OH+ 15% WR-15----		H Neat	H Neat				

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 41, A.I., Texas Natural Resources Code, that I am authorized to make this certification that the cementing of casing and/or the plugging of cement plugs in this well as shown in the report was performed by me or under my supervision and that the cementing data and facts presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers cementing data only.

William Evans, Serv. Sup. The Western Co. William Evans
 Name and title of cementer's representative Cementing company Signature

P. O. Box 841 Liberty, TX 77575 (409) 336-7218 11-8-85
 Address City, State, Zip Code Tel. Area Code, Number Date, mo, day, yr

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 41, A.I., Texas Natural Resources Code, that I am authorized to make this certification that I have knowledge of the operations and activities conducted in this well and that the data and facts presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all well activities.

Dale P. Jewett Vice-President Dale P. Jewett
 Typed or printed name of operator's representative Title Signature

P. O. Box 8640 Wichita KS 67208 316-682-5523 11-14-85
 Address City, State, Zip Code Tel. Area Code, Number Date, mo, day, yr

Instructions to Form W-15, Cementing Report

IMPORTANT: Operators and cementing companies in state wells with existing permits of the Commission, Statewide Leases & Water Protection, 11, Casing, Cementing, Drilling and Completion, and 14, Well Plugging, or offshore operations, see the requirements, Chapter 14.

A. What to file: An operator shall file an initial cementing report, Form W-15, for each cement plug or plug used in a well. The cementing of different casing strings on a well by one cementing company must be reported on separate Form W-15. It should be filed with the following:

- An initial oil or gas production report, Form W-2 or G-1, as required by state rules or special orders.
- Form W-4, Application for Multiple Completion, if the well is a multiple completion well.
- Form W-3, Plugging Record, unless the W-15 signed by the cementing company representative. When reporting dry holes, permittees must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

B. Where to file: The appropriate Commission District Office for the county in which the well is located.

C. Surface casing: An operator must set and cement surface casing in a zone of usable quality water strata (as defined by the Texas Department of Water Resources, Austin) before drilling a well in an oil field or area in which the conditions are subject to a fresh surface casing requirements are not specified in the applicable rules; an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

D. Centralizers: Surface casing must be centralized at the shoe of each casing string by setting a centralizer in the casing string in a zone of usable quality water strata or nondeviated holes. A centralizer must be placed every 100 feet in the casing string from the ground surface to the bottom of the well. All centralizers must meet API specifications.

E. Exceptions and alternative casing programs: The operator must file a written application with the Commission for an exception to the requirements. The operator must state the reasons for the requested exception and submit an adequate program for casing and cementing in the zone containing usable quality water. The District Director may approve or disapprove the proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.

F. Intermediate and production casing: For specific information, permittees/operators should consult Statewide Rules 14.03 and 14.04.

G. Plugging and abandoning: Cement plugs must be placed in the well as required by state rule 14. The plug must be set in a zone additional cement plugs. For onshore or inland wells, all cement plugs must be placed in the well and the casing must be set at least three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry in the well to fill the hole. The slurry must be set to a depth of at least 100 feet from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cements approved by the Commission for well operations. Cementing companies or other companies or operators can qualify as approved cements by demonstrating that they can meet the well plugging and abandonment requirements and regulations.

RAILROAD COMMISSION OF TEXAS

Oil and Gas Division

Please Read Instructions

**ELECTRIC LOG
STATUS REPORT**

FORM L-1

(Temporary)
Eff. 09-01-85
Rev. 8-17-85

As required by statute (T.N.R.C. Chapter 91, Subchapter M) and defined by Statewide Rule 16 (see copy on reverse side), a copy of a basic electric log run on a well must be filed with the completion reports (Form W-2 and Form G-1) and plugging reports for dry holes (Form W-3). These will become a part of the public record.

You may, however, request a one-year period of confidentiality during which the logs will be kept in your possession. Prior to the expiration of the initial period of confidentiality, you may request a renewal for a two-year period. Logs of offshore wells in State waters may be granted an additional two-year extension. At the end of the period(s) of confidentiality, a copy of a basic electric log must be filed with the Commission.

INSTRUCTIONS

When to file the L-1

- with ALL completion reports and with plugging reports on dry holes

Where to file the L-1

- with the appropriate Commission district office

Filling out the L-1

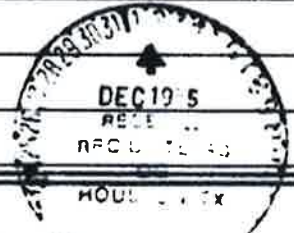
- Section I and the signature section must be filled out for all wells. Complete only the appropriate part of Section II.

SECTION I. IDENTIFICATION

OPERATOR NAME exactly as on Form P-5 GOULD OIL, INC.	COUNTY NAME HARRIS	DISTRICT NO. 03
LEASE NAME B.S.I. - WESTERN	DRILLING PERMIT NO. 284849	WELL NO. 1
	API NO. 42-201-31968	

SECTION II. LOG STATUS

<p>A <input type="checkbox"/> Log(s) Attached Log type(s) as shown on header</p> <p>_____ _____ _____</p> <p>Company lease name on log, if different from that in Section I</p> <p>_____</p>	<p>B <input checked="" type="checkbox"/> Log(s) Not Attached Confidentiality requested. If confidentiality not requested, please explain</p> <p>_____ _____</p> <p>Please return the DIFL & MT logs previously submitted with confidentiality letter dated November 5, 1985</p> <p>_____ _____</p>
---	--



<p><i>Dale P. Jewett</i> _____ signature</p> <p>Dale P. Jewett _____ name (print)</p>	<p>Vice-President _____ title</p> <p>(316) 68-5523 _____ phone</p> <p>11/26/85 _____ date</p>
--	---

GOULD OIL INC.

P. O. BOX 8640
WICHITA KANSAS 67208

August 20, 1985

Railroad Commission of Texas
Oil & Gas Division, Drilling Permits
P. O. Drawer 12967, Capitol Station
Austin, TX 78711

RE: B.S.I. - Western #1
Harris County, Texas

Dear Sirs:

Mr. Gary Beyer with the Texas Department of Water Resources telephoned this office today with their recommendation for surface casing on the above referenced well as follows:

The interval from the land surface to a depth of 1600' must be protected (SC-3555).

Mr. Beyer is mailing this recommendation today and we will forward a copy to your office as soon as we receive it.

Sincerely,



Dale P. Jewett
Vice-President

DPJ:slg

Enclosures