



AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pCS1731132655

3RP - 1057

BP AMERICA

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: BP America Production Co.	Contact: Steve Moskal
Address: 380 Airport Road, Durango, CO 81303	Telephone No.: 505-330-9179
Facility Name: Sandoval Gas Com A 001A	Facility Type: Natural Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 300422294
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LOCATION OF RELEASE

Unit Letter C	Section 35	Township 30N	Range 09W	Feet from the 1,150	North/South Line North	Feet from the 1,590	East/West Line West	County: San Juan
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Latitude 36.77166° Longitude -107.75353°

NATURE OF RELEASE

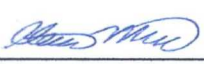
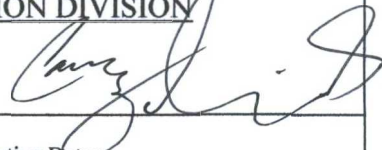
Type of Release: produced water, oil	Volume of Release: unknown	Volume Recovered: unknown
Source of Release: Compressor pit - historical	Date and Hour of Occurrence: unknown	Date and Hour of Discovery: 10/28/2003
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action. * A historical compressor discharge pit was noted in a 2003 pit closure. The pit was sampled with results above the pit closure standards as well as the spill and release guidelines. BP installed one soil boring with refusal at ~17' bgs. with a soil sample collected at that depth. This sample too was above the site closure standards. Groundwater is estimated to be 30-35' bgs. BP excavated approximately 50 cubic yards of soil in 2006 and treated with onsite composting and advanced one boring.

Describe Area Affected and Cleanup Action Taken. * BP has installed a total of 4 groundwater monitoring wells; MW-1-dry; MW-2- LNAPL; MW-3-dry; MW-4-dry. Due to either dry wells or free product, there is no groundwater quality data available. The former third-party gathering company has identified groundwater impacts as well. Attached is the soil boring data from the monitoring well installations.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

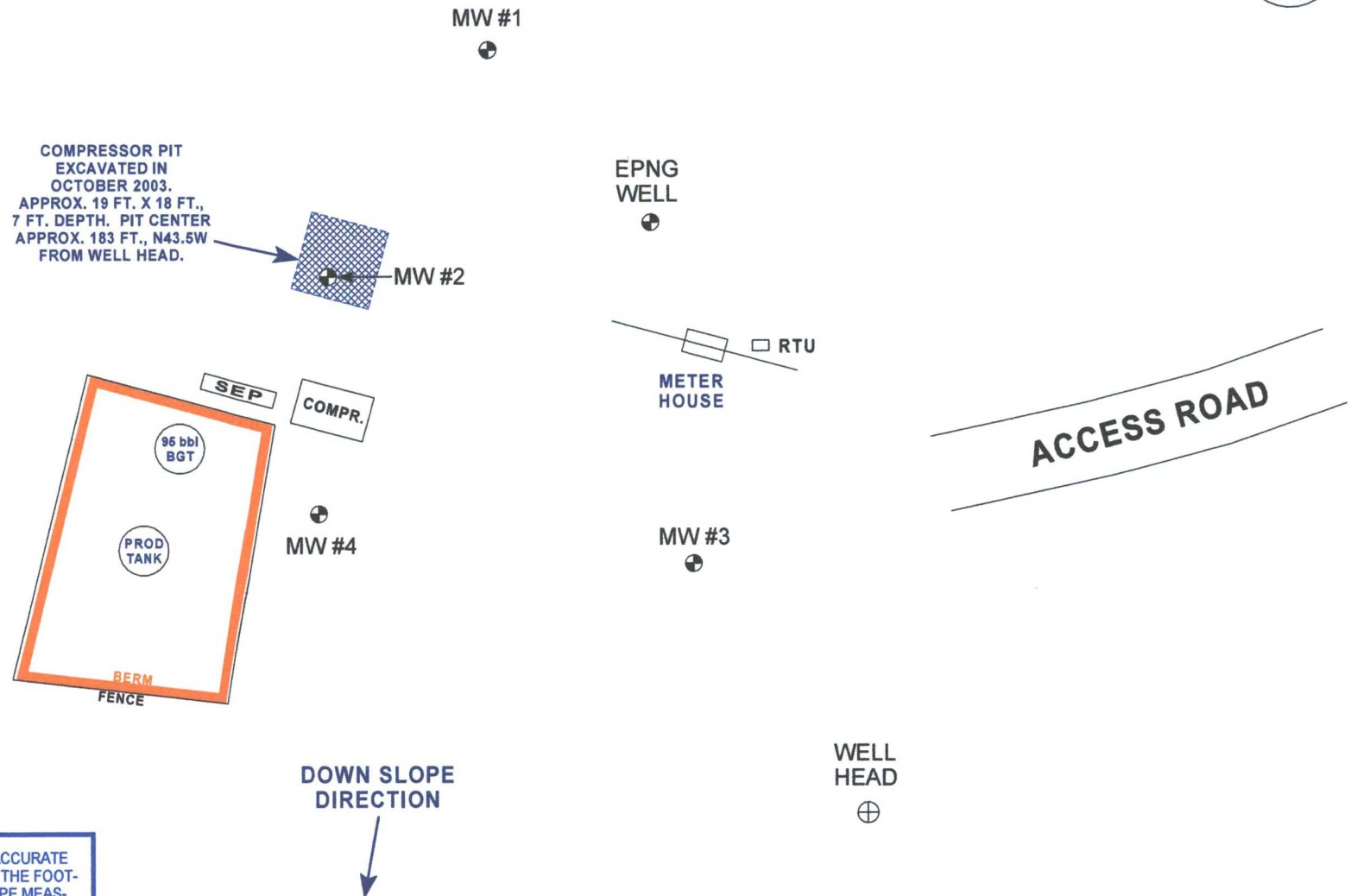
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Steve Moskal	Approved by Environmental Specialist: 	
Title: Field Environmental Coordinator	Approval Date: 2/6/18	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: Additional Remediation	Attached <input type="checkbox"/>
Date: January 30, 2018	Phone: 505-326-9497	

* Attach Additional Sheets If Necessary

Will Be Required.
#NCS 1803742861 3RP-1057

(22)

FIGURE 1



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE
AS THE INSTRUMENTS USED IN OBTAINING THE FOOT-
AGE & BEARING FROM THE WELL HEAD (TAPE MEAS-
URE, LASER RANGE FINDER, & BRUNTON COMPASS).
ALL OTHER STRUCTURES DISPLAYED ON THIS MAP
ARE SOLELY FOR REFERENCE AND MAY NOT BE TO
SCALE. MAGNETIC DECLINATION USED ~ 10° E.

0 40 80 FT.

BP AMERICA PRODUCTION CO.
SANDOVAL GC A # 1A
NE/4 NW/4 SEC. 35, T30N, R9W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW INSTALLATIONS
DRAWN BY: NJV
FILENAME: SANDOVAL GC A 1A-SM3.SKF
REVISED: 12-08-11

**SITE
MAP**
11/11

BLAGG ENGINEERING, Inc.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

BORING #..... BH1
MW #..... NA
PAGE #..... 1
DATE STARTED 09/20/06
DATE FINISHED 09/20/06
OPERATOR..... DP
PREPARED BY NJV

CLIENT: **BP AMERICA PRODUCTION CO.**
LOCATION NAME: **SANDOVAL GC A #1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W**
CONTRACTOR: **BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**
EQUIPMENT USED: **MOBILE DRILL RIG (CME 75)**
BORING LOCATION: **180 FEET, N40W FROM WELL HEAD.**

FIELD CLASSIFICATION AND REMARKS


DEPTH (FT.)	INTERVAL	LITHOLOGY INTERVAL	OVM READING (ppm)	REMARKS
2				
4				
6				
8				
10				
12				
14				
16			1,491	
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				
40				

DARK YELLOWISH ORANGE TO DARK YELLOWISH BROWN SAND (FILL MATERIAL), NON COHESIVE, SLIGHTLY MOIST, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 7.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN / MEDIUM GRAY SAND INTERMIXED, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (7.0 - 12.0 FT. BELOW GRADE).

MEDIUM GRAY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (12.0 - 17.0 FT. BELOW GRADE).

BH1 @ 15-17 FT. TIME: 1218 BLOW COUNT = 50 PER 20 INCHES COLLECTED WITH SPLIT SPOON SAMPLER.
TPH = 10,000 ppm, BENZENE = 19 ppm, TOTAL BTEX = 1,183 ppm, CHLORIDE = 5.5 ppm.
AUGER REFUSAL - COBBLES ENCOUNTERED AT 17 FEET BELOW GRADE.

NOTES:  - SAND.
OVM - Organic Vapor Meter or Photo-ionization Detector (PID).
TPH - Total Petroleum Hydrocarbons EPA Method 8015B.
BTEX - benzene, toluene, ethylbenzene, total xylenes EPA Method 8021B.
ppm - Parts per million (unit value).

OVM CALIBRATION = 51.3 ppm
with 100 ppm Isobutylene gas &
response factor set @ 0.52;
DATE - 09/19/06, TIME - 1535.

BLAGG ENGINEERING, INC.

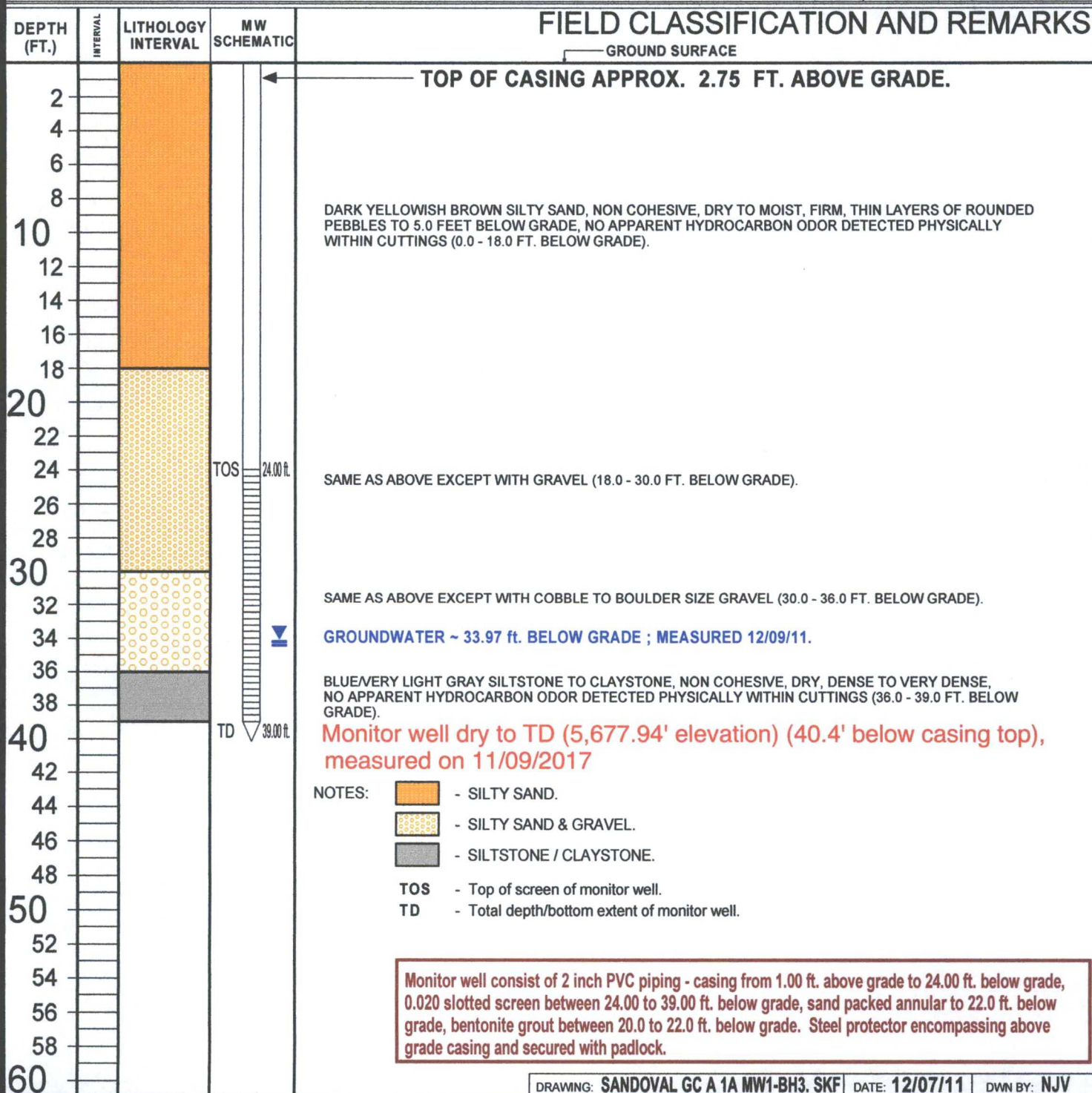
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 1

BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 205 FEET, N26W FROM WELL HEAD.

BORING #..... BH - 3
MW #..... 1
PAGE #..... 2
DATE STARTED 12/01/11
DATE FINISHED 12/02/11
OPERATOR..... KP
LOGGED BY..... JCB



BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

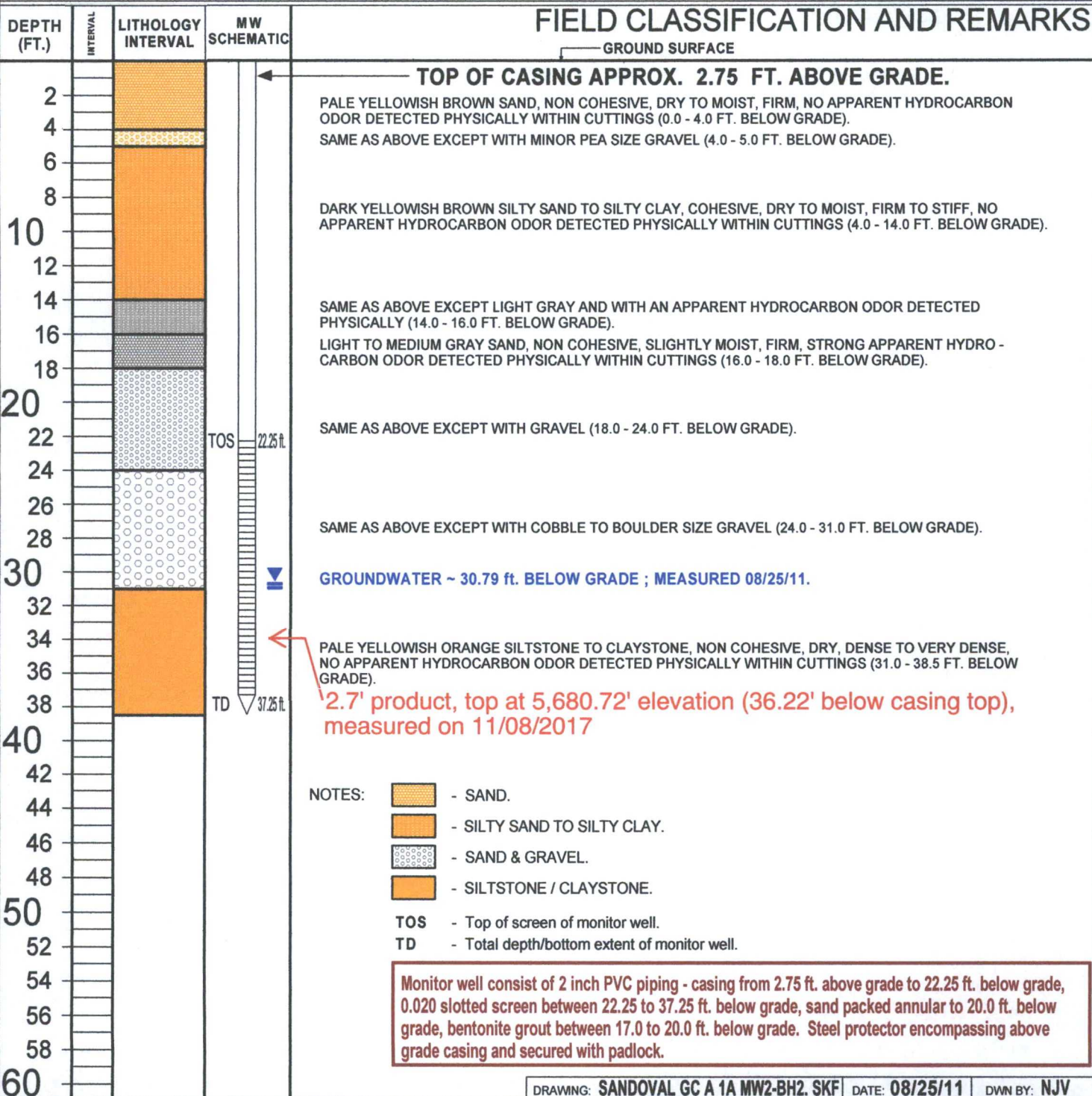
MW # 2

BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 182.7 FEET, N45W FROM WELL HEAD.

BORING #..... BH - 2
MW #..... 2
PAGE #..... 3
DATE STARTED 08/11/11
DATE FINISHED 08/22/11
OPERATOR..... KP
LOGGED BY..... NJV/JCB

FIELD CLASSIFICATION AND REMARKS



BLAGG ENGINEERING, INC.

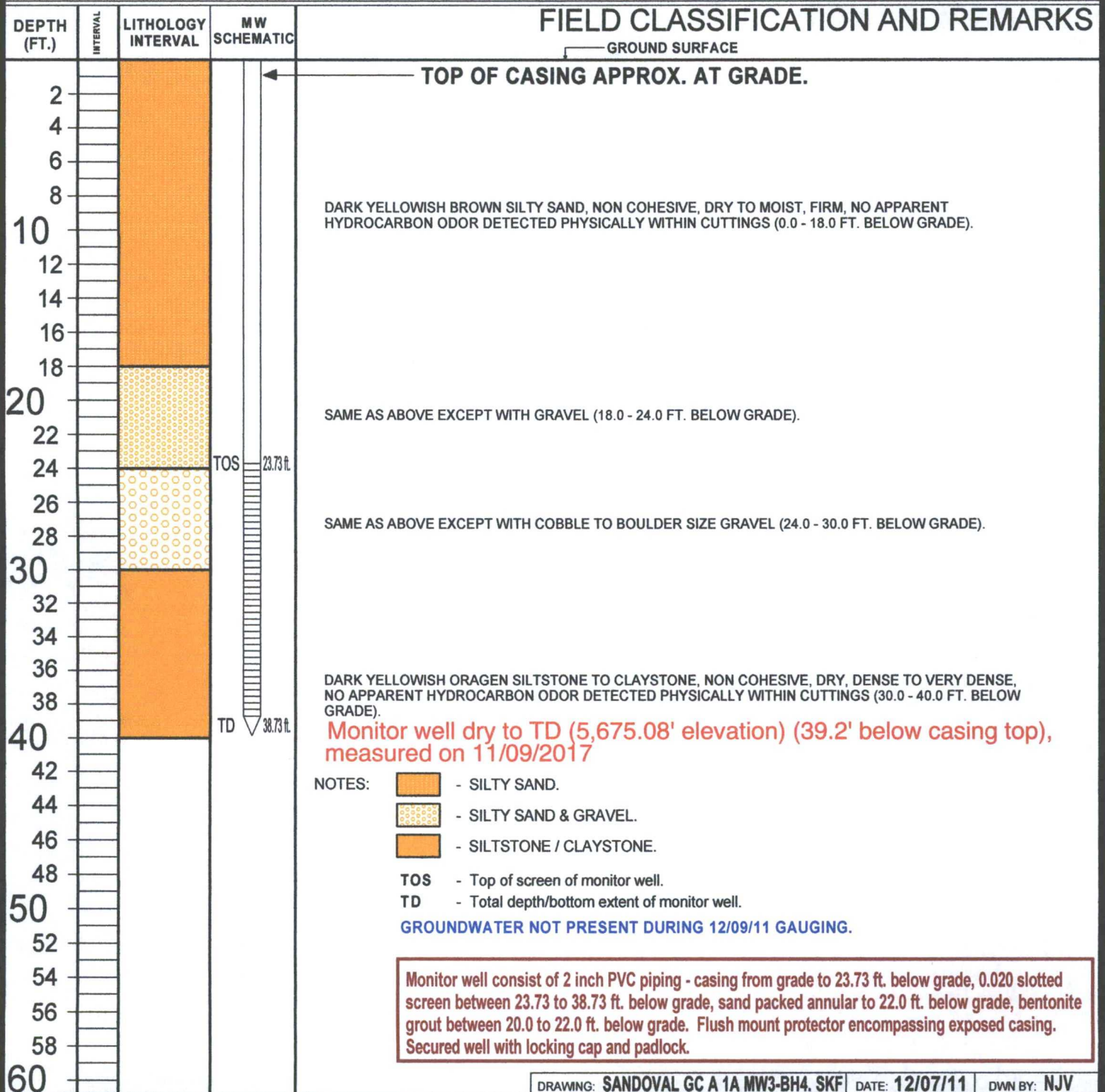
P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 3

BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 73 FEET, N34.5W FROM WELL HEAD.

BORING #..... BH - 4
MW #..... 3
PAGE #..... 4
DATE STARTED 12/05/11
DATE FINISHED 12/05/11
OPERATOR..... KP
LOGGED BY..... JCB



BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

MW # 4

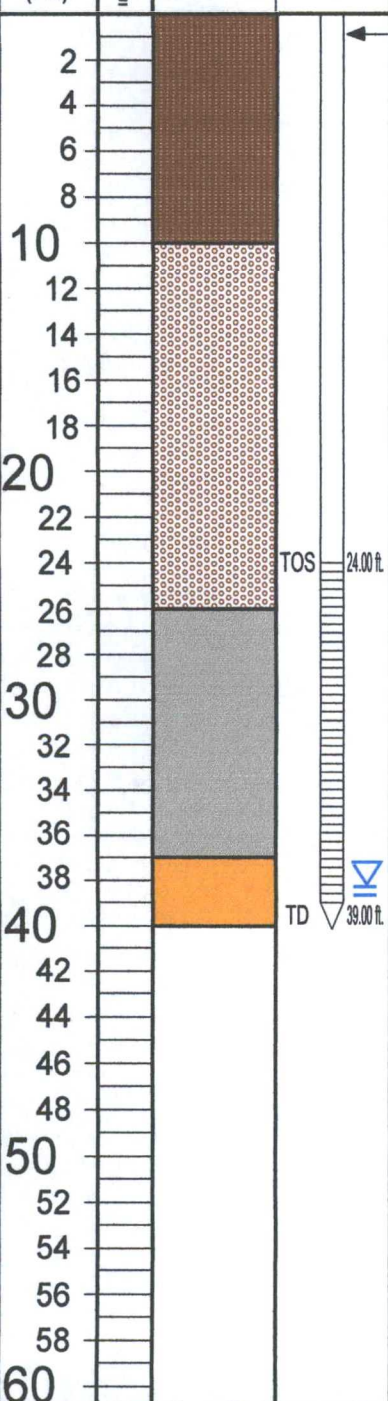
BORE / TEST HOLE REPORT

CLIENT: BP AMERICA PRODUCTION CO.
LOCATION NAME: SANDOVAL GC A # 1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: BLAGG ENGINEERING, INC. / KYVEK ENERGY SERVICES, INC.
EQUIPMENT USED: MOBILE DRILL RIG (CME 75) - TUBEX SYSTEM
BORING LOCATION: 150 FEET, N61W FROM WELL HEAD.

BORING #..... BH - 5
MW #..... 4
PAGE #..... 5
DATE STARTED 12/06/11
DATE FINISHED 12/06/11
OPERATOR..... KP
LOGGED BY..... NJV

FIELD CLASSIFICATION AND REMARKS

DEPTH (FT.)
INTERVAL
LITHOLOGY INTERVAL
MW SCHEMATIC



GROUND SURFACE
TOP OF CASING APPROX. 0.25 FT. BELOW GRADE.

MODERATE YELLOWISH BROWN SILTY SAND, NON COHESIVE, DRY TO MOIST, FIRM, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 10.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT WITH GRAVEL (10.0 - 26.0 FT. BELOW GRADE).

BLUE/VERY LIGHT GRAY SILTSTONE TO CLAYSTONE, NON COHESIVE, DRY, DENSE TO VERY DENSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (26.0 - 37.0 FT. BELOW GRADE).

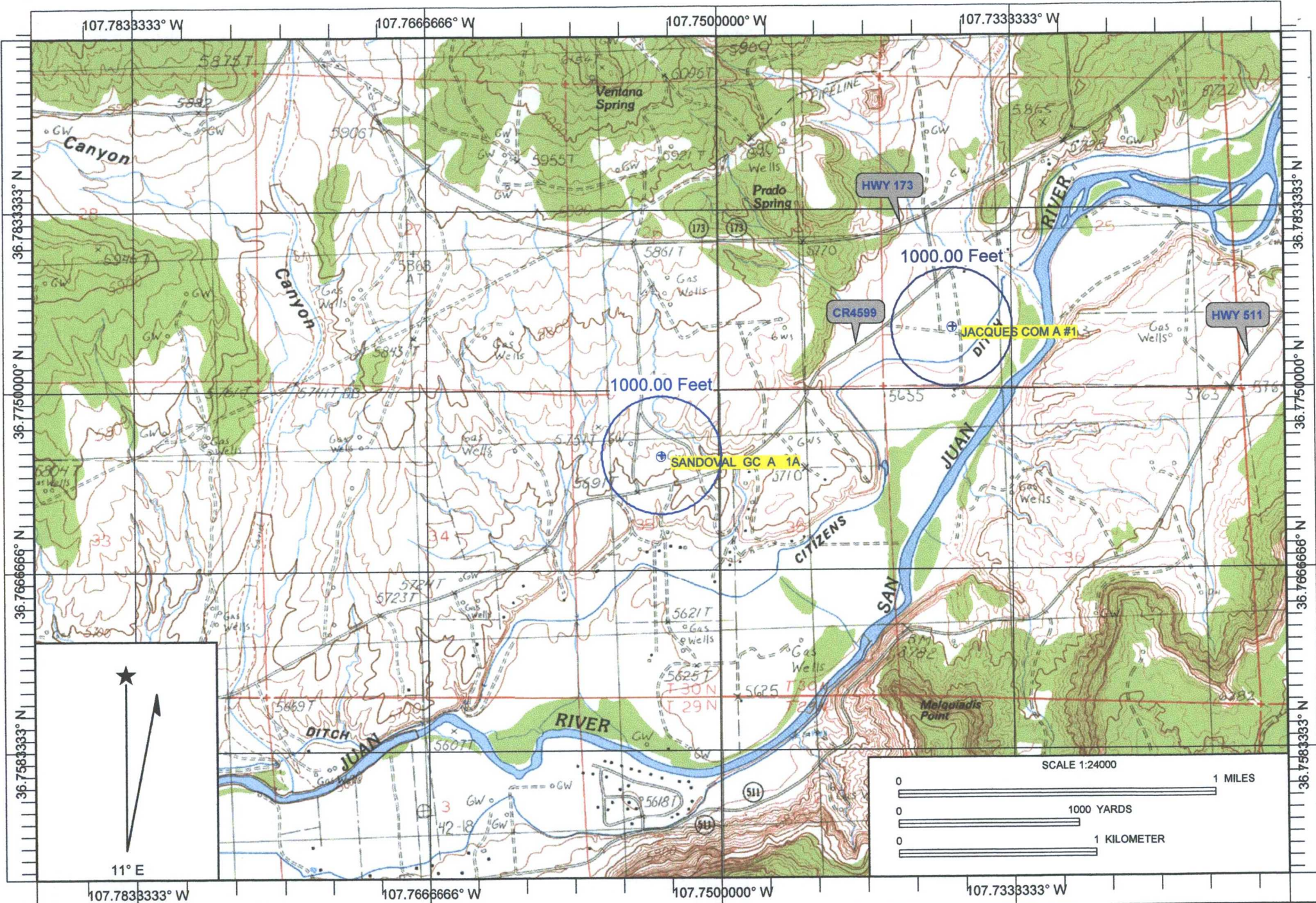
GW measured at 5,676.07' elevation (38.25' below casing top),
SAME AS ABOVE EXCEPT PALE YELLOWISH ORANGE (37.0 - 40.0 FT. BELOW GRADE).
measured on 11/20/2017

- NOTES:
- SILTY SAND.
 - SILTY SAND & GRAVEL.
 - SILTSTONE / CLAYSTONE.

- TOS - Top of screen of monitor well.
- TD - Total depth/bottom extent of monitor well.

GROUNDWATER NOT PRESENT DURING 12/09/11 GAUGING.

Monitor well consist of 2 inch PVC piping - casing from 0.25 ft. to 24.00 ft. below grade, 0.020 slotted screen between 24.00 to 39.00 ft. below grade, sand packed annular to 22.0 ft. below grade, bentonite grout between 20.0 to 22.0 ft. below grade. Flush mount protector encompassing exposed casing. Secured well with locking cap and padlock.



Name: TURLEY
 Date: 12/6/2007
 Scale: 1 inch equals 2000 feet

Location: 036.7719316° N 107.7533950° W
 Caption: Sandoval GC A #1A
 Unit C, Sec. 35, T30N, R9W

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

Form C-144
June 1, 2004

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

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: BP AMERICA PROD. CO. Telephone: (505)-326-9200 e-mail address: _____
Address: 200 ENERGY COURT. FARMINGTON. NM 87410
Facility or well name: SANDOVAL GC A #1A API #: 30-045- 22294 U/L or Qtr/Qtr C Sec 35 T 30N R 9W
County: SAN JUAN Latitude 36.77166 Longitude 107.75353 NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☐ Production ☒ Disposal ☐ COMPRESSOR
Workover ☐ Emergency ☐
Lined ☐ Unlined ☒
Liner type: Synthetic ☐ Thickness _____ mil Clay ☐
Pit Volume _____ bbl

Below-grade tank

Volume: _____ bbl Type of fluid: _____
Construction material: N/A
Double-walled, with leak detection? Yes ☐ If not, explain why not. _____

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet	(20 points)	
50 feet or more, but less than 100 feet	(10 points)	20
100 feet or more	(0 points)	

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes	(20 points)	
No	(0 points)	0

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)	
200 feet or more, but less than 1000 feet	(10 points)	0
1000 feet or more	(0 points)	

Ranking Score (Total Points)	20
-------------------------------------	-----------

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5)

Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: **PIT LOCATED APPROXIMATELY 183 FT. N40W FROM WELL HEAD.**
PIT EXCAVATION: WIDTH 15 ft., LENGTH 14 ft., DEPTH 7 ft. .
PIT REMEDIATION: CLOSE AS IS: ☐, LANDFARM: ☒, COMPOST: ☐, STOCKPILE: ☐, OTHER ☒ (explain) ESTABLISH VERTICAL EXTENT.
Cubic yards: 50

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an alternative OCD-approved plan ☒.

Date: 11/11/06

PrintedName/Title Jeff Blagg – P.E. # 11607 Signature Jeff Blagg

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title _____ Signature _____ Date: _____

District I

P.O. Box 1988, Hobbs, NM

District II

District III, Artesia, NM

District IV

1900 Rio Bravo Rd., Amar, NM

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

B1298

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>BP AMERICA PRODUCTION CO.</u>		Telephone: <u>(505) 326-9200</u>			
Address: <u>200 ENERGY COURT, FARMINGTON, NM 87401</u>					
Facility or Well Name: <u>Sandoval GC A #1A</u>					
Location: Unit or Qtr/Qtr Sec <u>C</u> Sec <u>35</u> T <u>30N</u> R <u>9W</u> County <u>San Juan</u>					
Pit Type: Separator <input type="checkbox"/> Dehydrator <input type="checkbox"/> Other <u>Compressor</u>					
Land Type: BLM <u>X</u> , State <input type="checkbox"/> , Fee <input type="checkbox"/> , Other <input type="checkbox"/>					
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Pit Location: (Attach diagram)</td> <td style="width: 70%;"> Pit dimensions: length <u>NA</u>, width <u>NA</u>, depth <u>NA</u> Reference: wellhead <u>X</u>, other <input type="checkbox"/> Footage from reference: <u>183'</u> Direction from reference: <u>40</u> Degrees <input type="checkbox"/> East <input checked="" type="checkbox"/> North <input type="checkbox"/> West <input type="checkbox"/> South </td> </tr> </table>			Pit Location: (Attach diagram)	Pit dimensions: length <u>NA</u> , width <u>NA</u> , depth <u>NA</u> Reference: wellhead <u>X</u> , other <input type="checkbox"/> Footage from reference: <u>183'</u> Direction from reference: <u>40</u> Degrees <input type="checkbox"/> East <input checked="" type="checkbox"/> North <input type="checkbox"/> West <input type="checkbox"/> South	
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<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater) </td> <td style="width: 30%;"> Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points) </td> <td style="width: 20%; text-align: right;"> <u>10 Kag</u> <u>0</u> </td> </tr> </table>			Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)	<u>10 Kag</u> <u>0</u>
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<table border="0" style="width: 100%;"> <tr> <td style="width: 60%;"> Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources) </td> <td style="width: 20%;"> Yes (20 points) No (0 points) </td> <td style="width: 20%; text-align: right;"> <u>0</u> </td> </tr> </table>			Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes (20 points) No (0 points)	<u>0</u>
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<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches) </td> <td style="width: 30%;"> Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points) </td> <td style="width: 20%; text-align: right;"> <u>0</u> <u>10 Kag</u> </td> </tr> </table>			Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	<u>0</u> <u>10 Kag</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet (20 points) 100 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	<u>0</u> <u>10 Kag</u>			
RANKING SCORE (TOTAL POINTS): <u>0</u>					
<div style="display: flex; justify-content: space-between;"> revised: 09/11/02 bel1202.wpd </div>					

Comp B1298

Date Remediation Started: _____

Date Completed: 11-3-03

Remediation Method:

(Check all appropriate sections)

Excavation ☒ lagApprox. cubic yards lag NA 50Landfarmed ☐

Insitu Bioremediation _____

Other CLOSE ASTS

Remediation Location:

(i.e. landfarmed onsite, name and location of offsite facility)

Onsite ☒

Offsite _____

General Description of Remedial Action:

Excavation. Test hole advanced. No remediation necessary.Investigate Vertical Extent

Groundwater Encountered:

No ☒Yes ☐

Depth _____

Final Pit

Closure Sampling:

(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth

10'

(Test hole bottom)

Sample date

11/3/03

Sample time

1146

Sample Results

Soil: Benzene

(ppm)

1.1

Water: Benzene

(ppb)

Total BTEX

(ppm)

83.2

Toluene

(ppb)

Field Headspace

(ppm)

654

Ethylbenzene

(ppb)

TPH

(ppm)

3040

Total Xylenes

(ppb)

Groundwater Sample:

Yes ☐No ☒

(If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 11-3-03

PRINTED NAME

Jeffrey C. Blagg

SIGNATURE

Jeffrey C. Blagg

AND TITLE

PresidentP.E. # 11607

revised: 03/27/02

bel1202.wpd

CLIENT: <u>BP</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>81298</u>
		COCR NO: <u>HALL</u>

FIELD REPORT: PIT CLOSURE VERIFICATIONPAGE No: 1 of 1

LOCATION: NAME: <u>SANDOVAL GC A</u> WELL#: <u>1A</u> TYPE: <u>COMPR.</u>	DATE STARTED: <u>10/28/03</u>
QUAD/UNIT: <u>C SEC: 35 TWP: 30N RNG: 9W PM: NM CNTY: SJ ST: NM</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>1150'N/1590'W</u> NELNW CONTRACTOR: <u>FLINT (LARRY)</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>

EXCAVATION APPROX. 15 FT. x 14 FT. x 7 FT. DEEP. CUBIC YARDAGE: 50DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMLAND USE: RANGE - BLM LEASE: NM 073292 FORMATION: MVFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 183 FT. N40W FROM WELLHEAD.DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM**SOIL AND EXCAVATION DESCRIPTION:**

OVM CALIB. READ. = 53.3 ppm
 OVM CALIB. GAS = 100 ppm RF = 0.62
 TIME: 2:25 am/pm DATE: 10/27/03

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____
 SOIL COLOR: MED. GRAY TO BLACK (3-10' BELOW GRADE)
 COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
 CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE
 PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
 DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
 MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATED
 DISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - TEST HOLE / EXCAVATED SOIL
 HC ODOR DETECTED: YES / NO EXPLANATION - EXCAVATION + OVM SAMPLE
 SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. _____
 ADDITIONAL COMMENTS: VERTICAL EXTENT NEEDS TO BE ESTABLISHED.

INVESTIGATE
VERTICAL EXTENT

FIELD 418.1 CALCULATIONS

SCALE

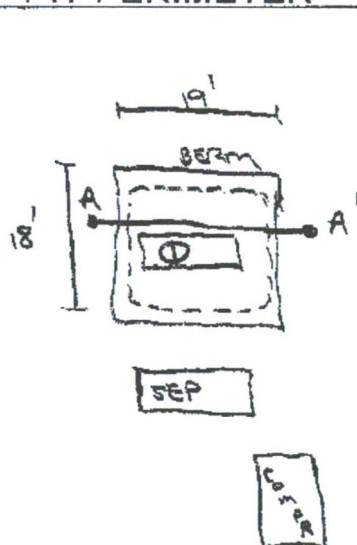


0 FT

SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

PIT PERIMETER PN

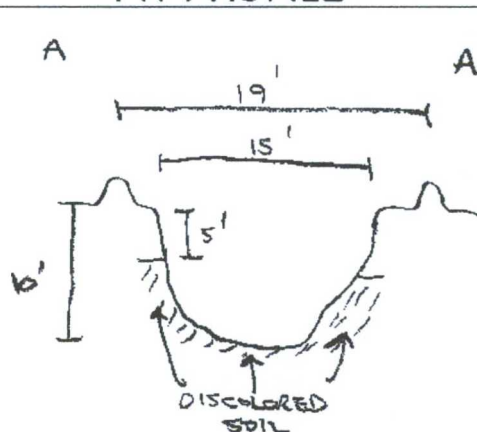
PIT PROFILE

OVM
READING

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @ 7'	1477
2 @ 10'	654
3 @	
4 @	
5 @	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
1 @ 7'	TPH (80158)	0950 10/28/03
"	BTEX (80218)	"
2 @ 10'	TPH (80158)	1146 11/8/03
"	BTEX (80218)	"



P.D. = PIT DEPRESSION; B.G. = BELOW GRADE; B = BELOW
 T.H. = TEST HOLE; ~ = APPROX.; T.B. = TANK BOTTOM

TRAVEL NOTES: CALLOUT: 10/27/03 - morn. ONSITE: 10/28/03 - morn.

Hall Environmental Analysis Laboratory

Date: 07-Nov-03

CLIENT: Blagg Engineering
Lab Order: 0310222
Project: Sandoval GC A #1A
Lab ID: 0310222-03

Client Sample ID: 1 @ 7' Compressor Pit
Collection Date: 10/28/2003 9:50:00 AM

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						
						Analyst: JMP
Diesel Range Organics (DRO)	720	100		mg/Kg	20	10/31/2003 1:00:23 PM
Motor Oil Range Organics (MRO)	1700	1000		mg/Kg	20	10/31/2003 1:00:23 PM
Surr: DNOP	0	60-124	S	%REC	20	10/31/2003 1:00:23 PM
EPA METHOD 8015B: GASOLINE RANGE						
						Analyst: NSB
Gasoline Range Organics (GRO)	3200	500		mg/Kg	100	11/3/2003 10:45:29 PM
Surr: BFB	115	74-118		%REC	100	11/3/2003 10:45:29 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: NSB
Benzene	4.3	2.5		mg/Kg	100	11/3/2003 10:45:29 PM
Toluene	110	2.5		mg/Kg	100	11/3/2003 10:45:29 PM
Ethylbenzene	38	2.5		mg/Kg	100	11/3/2003 10:45:29 PM
Xylenes, Total	300	2.5		mg/Kg	100	11/3/2003 10:45:29 PM
Surr: 4-Bromofluorobenzene	131	74-118	S	%REC	100	11/3/2003 10:45:29 PM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 14-Nov-03

CLIENT: Blagg Engineering
Lab Order: 0311023
Project: Sandoval GC A #1A
Lab ID: 0311023-01

Client Sample ID: 2@10' Compressor Pit
Collection Date: 11/3/2003 11:46:00 AM

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	550	50		mg/Kg	10	11/7/2003 9:53:39 PM
Motor Oil Range Organics (MRO)	1800	500		mg/Kg	10	11/7/2003 9:53:39 PM
Surr: DNOP	0	60-124	S	%REC	10	11/7/2003 9:53:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	690	50		mg/Kg	10	11/6/2003 11:08:52 AM
Surr: BFB	117	74-118		%REC	10	11/6/2003 11:08:52 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	1.1	0.25		mg/Kg	10	11/6/2003 11:08:52 AM
Toluene	12	0.25		mg/Kg	10	11/6/2003 11:08:52 AM
Ethylbenzene	7.1	0.25		mg/Kg	10	11/6/2003 11:08:52 AM
Xylenes, Total	63	0.25		mg/Kg	10	11/6/2003 11:08:52 AM
Surr: 4-Bromofluorobenzene	151	74-118	S	%REC	10	11/6/2003 11:08:52 AM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

BLAGG ENGINEERING, Inc.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

BORING #..... BH1
MW #..... NA
PAGE #..... 1
DATE STARTED 09/20/06
DATE FINISHED 09/20/06
OPERATOR..... DP
PREPARED BY NJV

CLIENT: **BP AMERICA PRODUCTION CO.**
LOCATION NAME: SANDOVAL GC A #1A COMPRESSOR PIT UNIT C, SEC. 35, T30N, R9W
CONTRACTOR: **BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**
EQUIPMENT USED: **MOBILE DRILL RIG (CME 75)**
BORING LOCATION: 180 FEET, N40W FROM WELL HEAD.

FIELD CLASSIFICATION AND REMARKS

DEPTH (FT.)	INTERVAL	LITHOLOGY INTERVAL	OVM READING (ppm)	FIELD CLASSIFICATION AND REMARKS
2				
4				
6				
8				
10				
12				
14				
16			1,491	
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				
40				

DARK YELLOWISH ORANGE TO DARK YELLOWISH BROWN SAND (FILL MATERIAL), NON COHESIVE, SLIGHTLY MOIST, FIRM TO LOOSE, NO APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 7.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN / MEDIUM GRAY SAND INTERMIXED, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (7.0 - 12.0 FT. BELOW GRADE).

MEDIUM GRAY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, STRONG APPARENT HYDROCARBON ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (12.0 - 17.0 FT. BELOW GRADE).

BH1 @ 15-17 FT. TIME: 1218 BLOW COUNT = 50 PER 20 INCHES COLLECTED WITH SPLIT SPOON SAMPLER.
TPH = 10,000 ppm, BENZENE = 19 ppm, TOTAL BTEX = 1,183 ppm, CHLORIDE = 5.5 ppm.
AUGER REFUSAL - COBBLES ENCOUNTERED AT 17 FEET BELOW GRADE.

NOTES:  - SAND.

OVM - Organic Vapor Meter or Photo-ionization Detector (PID).
TPH - Total Petroleum Hydrocarbons EPA Method 8015B.
BTEX - benzene, toluene, ethylbenzene, total xylenes EPA Method 8021B.
ppm - Parts per million (unit value).

OVM CALIBRATION = 51.3 ppm
with 100 ppm Isobutylene gas &
response factor set @ 0.52;
DATE - 09/19/06, TIME - 1535.

Hall Environmental Analysis Laboratory, Inc.

Date: 06-Oct-06

CLIENT:	Blagg Engineering	Client Sample ID:	BH1 @15'-17' COMPRESSOR P
Lab Order:	0609259	Collection Date:	9/20/2006 12:18:00 PM
Project:	Sandoval GC A #1A	Date Received:	9/21/2006
Lab ID:	0609259-01	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						
						Analyst: SCC
Diesel Range Organics (DRO)	1800	200		mg/Kg	20	9/26/2006 11:49:36 PM
Motor Oil Range Organics (MRO)	6800	1000		mg/Kg	20	9/26/2006 11:49:36 PM
Surr: DNOP	0	61.7-135	S	%REC	20	9/26/2006 11:49:36 PM
EPA METHOD 8015B: GASOLINE RANGE						
						Analyst: BDH
Gasoline Range Organics (GRO)	8200	250		mg/Kg	50	9/29/2006 2:50:06 PM
Surr: BFB	348	84.5-129	S	%REC	50	9/29/2006 2:50:06 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: BDH
Benzene	19	2.5		mg/Kg	50	9/29/2006 2:50:06 PM
Toluene	320	5.0		mg/Kg	100	10/1/2006 6:10:42 PM
Ethylbenzene	64	2.5		mg/Kg	50	9/29/2006 2:50:06 PM
Xylenes, Total	780	15		mg/Kg	100	10/1/2006 6:10:42 PM
Surr: 4-Bromofluorobenzene	124	76.8-115	S	%REC	50	9/29/2006 2:50:06 PM
EPA METHOD 9056A: ANIONS						
						Analyst: TES
Chloride	5.5	1.5		mg/Kg	5	9/26/2006 3:18:32 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Client: BLASS ENGR. / BP AMERICA

Address: P.O. BOX 87
BLFD., NM 87413

Phone #: 632-1199

Fax #:

QA / QC Package:

Std ☐ Level 4 ☐

Other:

Project Name:

SANDOVAL GC A #1A

Project #:

Project Manager:

Sampler:

Sample Temperature:

60

4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

[illegible]

Date: 9/21/06	Time: 0730	Relinquished By: (Signature) <i>[Signature]</i>
Date:	Time:	Relinquished By: (Signature)

Received By: (Signature)	9-21-06 @ 1610
Received By: (Signature)	

Remarks:

CLIENT: BPBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 81298C.O.C. NO: 13919

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: SANDOVAL GC A WELL #: 1A PITS: COMPR.
QUAD/UNIT: C SEC: 35 TWP: 30N RNG: 9W PM: NM CNTY: ST ST: NM
QTR/FOOTAGE: NE/NW CONTRACTOR: FLINT (LARRY)DATE STARTED: 7/22/05
DATE FINISHED: _____ENVIRONMENTAL
SPECIALIST: NV

SOIL REMEDIATION:

50

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: _____

LAND USE: RANGE

LIFT DEPTH (ft): _____

0.5

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: <100'NEAREST SURFACE WATER: >1,000'NEAREST WATER SOURCE: >1,000'NMOCD RANKING SCORE: 10NMOCD TPH CLOSURE STD: 1,000 PPMSOIL TYPE: SAND SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____SOIL COLOR: DK. YELL. ORANGECOHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVECONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE

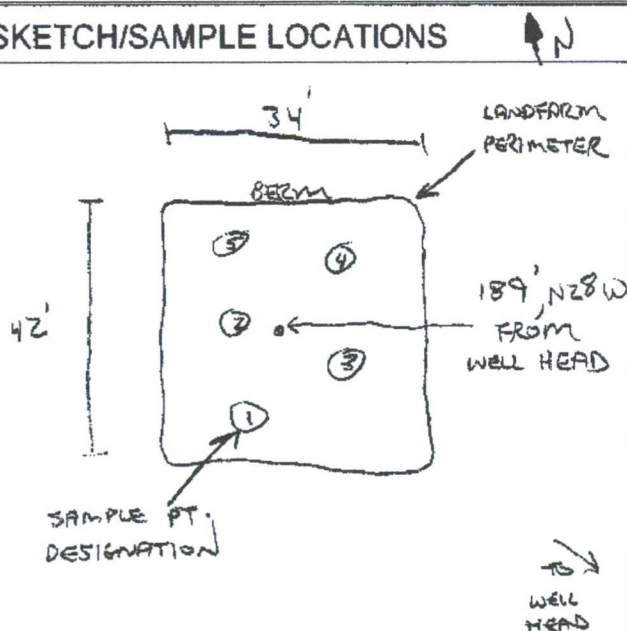
PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC

DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD

MOISTURE: DRY / SLIGHTLY MOIST / MOIST / WET / SATURATED / SUPER SATURATEDCLOSEDDISCOLORATION/STAINING OBSERVED: YES / NO EXPLANATION - _____HC ODOR DETECTED: YES / NO EXPLANATION - _____SAMPLING DEPTHS (LANDFARMS): 4-6 (INCHES)SAMPLE TYPE: GRAB / COMPOSITE # OF PTS. 5

ADDITIONAL COMMENTS: _____

SKETCH/SAMPLE LOCATIONS

OVM CALIB. READ. = 53.4 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 7:10 @ ppm DATE: 7/20/05

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (80158)	1255	ND

P.C. - 10/28/03

SCALE

0 FT

TRAVEL NOTES: CALLOUT: N/AONSITE: 7/22/05

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons


Client:	Blagg / BP	Project #:	94034-010
Sample ID:	LF - 1	Date Reported:	07-28-05
Laboratory Number:	33833	Date Sampled:	07-22-05
Chain of Custody No:	13919	Date Received:	07-25-05
Sample Matrix:	Soil	Date Extracted:	07-27-05
Preservative:	Cool	Date Analyzed:	07-28-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

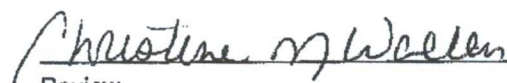
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Sandoval GC A #1A Landfarm 5 Pt. Composite Sample.**


Analyst


Review

13919

san juan reproduction 578-129



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

July 9, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. 7-235-437-308

Mr. B.D. Shaw
Amoco Production Company
200 Amoco Court
Farmington, New Mexico 87401

RE: SAN JUAN BASIN PIT GROUND WATER SITES

Dear Mr. Shaw:

Information in El Paso Field Services (EPFS) recent annual ground water monitoring report shows the presence of shallow ground at some well sites operated by Amoco Production Company (Amoco). Disposal activities at EPFS pits on these locations have resulted in contamination of shallow ground water. These sites also apparently have former unlined production pits operated by Amoco, some of which appear to be contributing to ground water contamination seen in EPFS monitoring wells.

Due to the presence of ground water contamination at these sites and the apparent commingling of contaminated waters from EPFS's former unlined dehy pit and Amoco's former unlined production pits, the OCD requests that Amoco cooperate with EPFS to investigate and remediate contaminated ground water at the sites listed below:

- | | |
|-------------------------------------|------------------------------|
| 1. Coldiron Com A#1 | Unit K, Sec. 02, T30N, R11W. |
| 2. Fields A #7A | Unit E, Sec. 34, T32N, R11W. |
| 3. Gallegos Canyon Unit Com A #142E | Unit G, Sec. 25, T29N, R12W. |
| 4. Sandoval Gas Com A #1A | Unit C, Sec. 35, T30N, R09W. |

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Denny Foust, OCD Aztec District Office
Sandra D. Miller, El Paso Field Services
Bill Liess, BLM Farmington Office

