

1R - 454

REPORTS

DATE:

2/6/2006



704 Central Parkway East
Suite 1220
Plano, Texas 75074

FACSIMILE TRANSMITTAL SHEET

TO:	Jack Ford	FROM:	Michael Henn
COMPANY:	NM OCD	DATE:	2-6-06
FAX NUMBER:	505-476-3462	TOTAL NO. OF PAGES INCLUDING COVER:	21
PHONE NUMBER:		SENDER'S REFERENCE NUMBER:	972-665-0528
RE:		YOUR REFERENCE NUMBER:	972-665-9989 fax

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Jack – This is to serve as follow up and 24-hr. notification of well plugging activities at BP's Denton Gathering site on February 7, 2006.

Please see attached Well-Plugging Plans. Thanks MH

Cc: Chris Williams – District Manager - Hobbs District Office (fax 505-393-0720).

CONFIDENTIALITY NOTICE: This fax and the document(s) accompanying this fax contain confidential information which is legally privileged. The information is intended only for the use of the intended recipient named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on the contents of this e-mail and its attachments, except its direct delivery to the intended recipient named above, is strictly prohibited. If you have received this fax in error, please notify us immediately by telephone.



List the cement additives that will be used:

Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____

Approximately _____ gallons of water will be required for each 94 lb bag of cement mix.

Describe the method by which cement shall be placed in the well: _____



**WELL PLUGGING
PLAN**
(For Non-Artesian Wells)



I. FILING FEE: There is no filing fee for this form.

II. GENERAL:

File Number for Well to be Plugged: _____

MW-1

Name of Well Owner: Atlantic Richfield

Mailing Address: 501 Westlake Park Blvd.

City: Houston State: Tx Zip Code: 77079

Phone Number: 972-665-0528 Email: mhenn@delteanu.com

III. WELL DRILLER INFORMATION:

Name of Well Drilling Company: Straub Corporation

License No.: W.D. 1478

IV. WELL INFORMATION:

A copy of the well record for the well to be plugged should be attached to this plan.

Was well used for any type of monitoring program? Yes (If yes, please describe in section VII)

Reason for Plugging Well: Closure of remediation site

BORING LOG

BORING LOCATION: In excavation approx. 4 ft below ground surface

BORING / WELL NO: MW-1
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Hollow Stem Auger
DATE STARTED: 6/02/04
DATE COMPLETED: 6/02/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: 5 ft. Split Spoon
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A M P L E T Y P E	R E C %	O V M (ppm)	S T R U C T U R E	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
			60		1100	Buff clayey silt with fine-grained sand, small to large gravel (20%) with small cobbles (10%), dry	
5			30		1111	Light brown to white limestone (grainstone) gravel with very fine-grained sand and silt	
10	1			0.0			
			90		1132	Same as Above with large gravel (20%) round to subangular Buff to red lithographic limestone	
15			90		1144	Light reddish-brown limestone (grainstone), trace of brachiopod fragments	
20	2			0.0			
			95		1158	Red-brown slightly lithified fine-grained sandstone	
25			90		1216		
30	3			2.0		Red fine-grained sand, moist	

PAGE: 1 OF 3

BORING LOG

BORING / WELL NO: MW-1
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Hollow Stem Auger
DATE STARTED: 6/02/04
DATE COMPLETED: 6/02/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: 5 ft. Split Spoon
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N	R E C O R D	O V E R C O M P L E T E	S A T U R A T I O N	SURFACE ELEVATION:	REMARKS
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BORING LOG

BORING / WELL NO: MW-1
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Hollow Stem Auger
DATE STARTED: 6/02/04
DATE COMPLETED: 6/02/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: 5 ft. Split Spoon
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N	R E C O R D	O V E R C O M P L E T E	S A T U R A T I O N	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
						Same as Above	
			90		1222	Buff to light gray fine-grained sandstone	
35						Buff fine-grained sand, slightly moist	



WELL PLUGGING
PLAN
(For Non-Artesian Wells)



I. FILING FEE: There is no filing fee for this form.

II. GENERAL:

File Number for Well to be Plugged: MNH-2
Name of Well Owner: Atlantic Richfield
Mailing Address: 501 Westlake Park Blvd.
City: Houston State: Tx Zip Code: 77079
Phone Number: 972-665-0528 Email: mhenr@deltaenv.com

III. WELL DRILLER INFORMATION:

Name of Well Drilling Company: Straub Corporation
License No.: W 01478

IV. WELL INFORMATION:

A copy of the well record for the well to be plugged should be attached to this plan.

Was well used for any type of monitoring program? Yes (If yes, please describe in section VII)

Reason for Plugging Well: Closure of remediation site

Well Location: Section 11-Township 15S, Range 37E, Lovington Highway East, Lovington, NM
x = _____ ft, y = _____ ft, NMCS, NAD
latitude = 32° 2' 3.8" N longitude = 103° 11' 10" W ft, WGS 1984

Depth of the well: 70 feet
Size of the casing: 4 inches Type of casing: _____

Location of perforations: from 55 feet to 70 feet
from _____ feet to _____ feet
from _____ feet to _____ feet

Location of the sanitary seal: —

Was the well built with surface casing? No

If the well has surface casing, is the annulus surrounding the surface casing grouted or otherwise sealed? _____

Static water level: 60 feet below land surface

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Has all pumping equipment and associated piping been removed from the well? Yes

Approximately how much sealing material will be required to plug the well? 200 lbs

Well is to be plugged with:
☒ Neat cement slurry
☒ Bentonite based plugging material
☐ Clean native fill or drill cuttings (see below)
☐ Other (please explain below)

If well is to be plugged with clean native fill or drill cuttings, the top ten feet of the well shall be plugged with neat cement slurry, bentonite based plugging material, or other sealing material approved by the state engineer

VI. PLUGGING AND SEALING MATERIALS:

If cement is to be used as a plugging material, provide the following information:

List the cement additives that will be used:

Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____

Approximately _____ gallons of water will be required for each 94 lb bag of cement mix.

Describe the method by which cement shall be placed in the well: _____

Cement will be: _____ Delivered pre-mixed to site.
_____ Mixed on-site

If bentonite-based sealant is to be used, provide the following information:

Trade name: Wyoming Bentonite Hole Plug
Percentage of Solids: 100%

VII. ADDITIONAL INFORMATION: List additional information below:

Surface Standpipe cement pad and PVC piping will be removed from well. Well will be plugged with bentonite plugging material to approximately 2 ft below land surface. Top 2 feet of well will be capped with cement to surface level.

Work is scheduled to be completed on February 7, 2006

VIII. SIGNATURE:

I, Michael Ham - Agent, say that I have carefully read the foregoing plugging plan, statement and attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the drilling of wells and will comply with them, and that each and all of the statements in the application, statement and attachments are true to the best of my knowledge and belief.

Michael Ham - Agent, applicant
By _____

Dated this 3 day of February, 2006

BORING LOG

BORING LOCATION: _____

BORING / WELL NO: MW-2
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Hollow Stem Auger
DATE STARTED: 6/02/04
DATE COMPLETED: 6/04/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: 5 ft. Split Spoon
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A M P L E T Y P E	R E C %	O V M (ppm)	S A M P L E T I M E	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
			30		1645	Gray clayey silt, firm, dry	
5			35		1654	Buff very fine-grained lime sand, 15% clay, 20% medium to large rounded to subangular gravel (grainstone) fragments, dry	
8				0.0			
10			40		1706	Light gray to buff mudstone	
15			40		1724	Same as above (buff)	
9				0.0			
20			95		1158	Buff very dense grainstone	
25							
30						AIR ROTARY 6/03/04	

BORING LOG

BORING / WELL NO: MW-2
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Hollow Stem Auger
DATE STARTED: 6/02/04
DATE COMPLETED: 6/04/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: 5 ft. Split Spoon
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N %	R E C %	O V M (ppm)	S A T U R A T I O N %	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
						Limestone	
35						Light reddish-brown fine-grained sand, slightly moist	
	16		30	0.0	1720		
40						Light gray to buff limestone (dense grainstone)	
			10		1732		
45						Light reddish-brown fine-grained sand, slightly moist	Stop on 6/02/04 at 45 feet
6/4/2004			60		717		
	17			0.0		Slightly Lithified 49-50 feet	
50						Tan to buff fine-grained sand with 15% small to medium grained sandstone gravel (subangular) slightly moist	
			50		729		
55							
			50		748		
	18			2.2			
60						Sand as above but very damp at 59.5 feet	

BORING LOG

BORING / WELL NO: MW-2
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Hollow Stem Auger
DATE STARTED: 6/02/04
DATE COMPLETED: 6/04/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: 5 ft. Split Spoon
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N	R E C %	O V M (ppm)	S A T U R A T I O N	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
19						Light reddish-brown clayey sand, saturated	GROUNDWATER at 60 FEET
			40		805	Light reddish-brown fine-grained sand, wet	
65							
			40		832		
70						15 feet of pre-pack screen 2 feet bentonite Grout to surface	
75							
80							
85							
90							

PAGE: 3 OF 3



WELL PLUGGING
PLAN
(For Non-Artesian Wells)



I. FILING FEE: There is no filing fee for this form.

II. GENERAL:

File Number for Well to be Plugged: MW-3
Name of Well Owner: Atlantic Richfield
Mailing Address: 501 Westbank Park Blvd
City: Houston State: TX Zip Code: 77079
Phone Number: 972-665-0528 Email: mhenry@deltaenv.com

III. WELL DRILLER INFORMATION:

Name of Well Drilling Company: Straub Corporation
License No.: WD1478

IV. WELL INFORMATION:

A copy of the well record for the well to be plugged should be attached to this plan.

Was well used for any type of monitoring program? Yes (If yes, please describe in section VII)

Reason for Plugging Well: Closure of remediation site

Well Location: Section 11 - Township 15S, Range 37E, Louisa Highway East, Louisa, AL
x = ft, y = ft, NMCS, NAD
latitude = 32° 2' 3.8" N ft, longitude = 103° 12' 10" W ft, WGS 1984

Depth of the well: 70 feet
Size of the casing: 4 inches Type of casing: PVC

Location of perforations: from 55 feet to 70 feet
from feet to feet
from feet to feet

Location of the sanitary seal: —

Was the well built with surface casing? No

If the well has surface casing, is the annulus surrounding the surface casing grouted or otherwise sealed? —

Static water level: 102.5 feet below land surface

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Has all pumping equipment and associated piping been removed from the well? yes

Approximately how much sealing material will be required to plug the well? 200 lbs

Well is to be plugged with:
☒ Neat cement slurry
☒ Bentonite based plugging material
☐ Clean native fill or drill cuttings (see below)
☐ Other (please explain below)

If well is to be plugged with clean native fill or drill cuttings, the top ten feet of the well shall be plugged with neat cement slurry, bentonite based plugging material, or other sealing material approved by the state engineer

VI. PLUGGING AND SEALING MATERIALS:

If cement is to be used as a plugging material, provide the following information:

List the cement additives that will be used:

Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____

Approximately _____ gallons of water will be required for each 94 lb bag of cement mix.

Describe the method by which cement shall be placed in the well: _____

Cement will be: _____ Delivered pre-mixed to site.
_____ Mixed on-site

If bentonite-based sealant is to be used, provide the following information:

Trade name: Wyoming Bentonite Holeplug
Percentage of Solids: 100%

VII. ADDITIONAL INFORMATION: List additional information below:

Surface Stand pipe, cement pad and PVC piping will be removed from well. Well will be plugged with bentonite plugging material to approximately 2 feet of land surface. Top 2 feet of well will be capped with cement to surface level.

Work is scheduled to be completed on February 7, 2006

VIII. SIGNATURE:

I, Michael Hana - Agent, say that I have carefully read the foregoing plugging plan, statement and attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the drilling of wells and will comply with them, and that each and all of the statements in the application, statement and attachments are true to the best of my knowledge and belief.

By Michael Hana - Agent, applicant.

Dated this 3 day of February, 2006

BORING LOG

BORING LOCATION: Moved 15 ft NE of SB-3

BORING / WELL NO: MW-3
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Air Rotary
DATE STARTED: 6/4/2004
DATE COMPLETED: 6/4/2004

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: No Samples
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A M P L E T Y P E	R E C %	OVM (ppm)	S A M P L E T I M E	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
						Dark gray clayey silt, dry	
						Light buff silty clay, slightly moist	
5						Buff limestone (mudstone) crystalline	
10						Light gray crystalline mudstone	
15						Pink to red dolomite	
						Interbedded light gray mudstone and pink dolomite (dense)	
20							
25						Light reddish-brown fine-grained sand, 10% fine-grain gravel, slightly moist	
30							

BORING LOG

BORING / WELL NO: MW-3
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Air Rotary
DATE STARTED: 6/4/2004
DATE COMPLETED: 6/4/2004

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: No Samples
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N	R E C %	O V M (ppm)	S A T U R A T I O N	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
						Red-brown fine to very fine-grained sand with thin zones of partially lithified sandstone	
35						Same as Above	
40						Light tan fine to very fine-grained sand with very fine-grained gravel (10%), dry	
45						Light red to brown fine to very fine-grained sand with very fine-grained gravel (10%), dry	
50						Light red-brown fine to very fine-grained sand with 10% fine-grained rounded gravel, slightly moist	
55						Light red-brown fine to very fine-grained sand with fine-grained round to subangular gravel (15%), moist	
60							

PAGE: 2 OF 3

BORING LOG

BORING / WELL NO: MW-3
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Air Rotary
DATE STARTED: 6/4/2004
DATE COMPLETED: 6/4/2004

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: No Samples
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N	R E C %	O V M (ppm)	S A T U R A T I O N	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
						GROUNDWATER AT 60.5 feet Red brown fine to very fine-grained sand, 5-10% coarse sand, very moist to damp at 60 to 63 feet.	
65						Red brown fine to very fine-grained sand, wet	
70						15 feet of pre-pack screen (55 - 70 ft) 2 feet of bentonite plug Grout to surface	
75							
80							
85							
90							



WELL PLUGGING PLAN (For Non-Artesian Wells)



I. FILING FEE: There is no filing fee for this form.

II. GENERAL:

File Number for Well to be Plugged: WV-4
Name of Well Owner: Atlantic Richfield
Mailing Address: 501 Westlake Park Blvd.
City: Houston State: TX Zip Code: 77079
Phone Number: 972-665-0528 Email: mhearn@dallasenv.com

III. WELL DRILLER INFORMATION:

Name of Well Drilling Company: Straub Corporation
License No.: W01478

IV. WELL INFORMATION:

A copy of the well record for the well to be plugged should be attached to this plan.

Was well used for any type of monitoring program? Yes (If yes, please describe in section VII)

Reason for Plugging Well: Closure of remediation site

Well Location: Section 11 - Township 15S, Range 37E, Lovington Highway East, Lovington 114
x = ft, y = ft, NMCS, NAD
latitude = 32° 2' 3.8" N ft, longitude = 103° 10' 10" W ft, WGS 1984

Depth of the well: 70 feet
Size of the casing: 4 inches Type of casing: PVC

Location of perforations: from 55 feet to 70 feet
from 55 feet to 70 feet
from 55 feet to 70 feet

Location of the sanitary seal: ---

Was the well built with surface casing? No

If the well has surface casing, is the annulus surrounding the surface casing grouted or otherwise sealed? ---

Static water level: 59.5 feet below land surface

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Has all pumping equipment and associated piping been removed from the well? yes

Approximately how much sealing material will be required to plug the well? 200 lbs

Well is to be plugged with:
☒ Neat cement slurry
☒ Bentonite based plugging material
☐ Clean native fill or drill cuttings (see below)
☐ Other (please explain below)

If well is to be plugged with clean native fill or drill cuttings, the top ten feet of the well shall be plugged with neat cement slurry, bentonite based plugging material, or other sealing material approved by the state engineer

VI. PLUGGING AND SEALING MATERIALS:

If cement is to be used as a plugging material, provide the following information:

List the cement additives that will be used:

Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____
Cement additive: _____	Percent by dry weight: _____

Approximately _____ gallons of water will be required for each 94 lb bag of cement mix.

Describe the method by which cement shall be placed in the well: _____

Cement will be: _____ Delivered pre-mixed to site.
_____ Mixed on-site

If bentonite-based sealant is to be used, provide the following information:

Trade-name: Wyoming Bentonite Hole Plug
Percentage of Solids: 100%

VII. ADDITIONAL INFORMATION: List additional information below:

Surface Standpipe Cement Pad and PVC piping will be removed from well. Well will be plugged with bentonite plugging material to approximately 2 feet below surface. Top 2 feet of well will be capped with cement to surface level.

Work is scheduled to be completed on February 7, 2006

VIII. SIGNATURE:

I, Michael Ham - Agent of AR, say that I have carefully read the foregoing plugging plan, statement and attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the drilling of wells and will comply with them, and that each and all of the statements in the application, statement and attachments are true to the best of my knowledge and belief.

Michael Ham - Agent, applicant.
By _____

Dated this 3 day of February, 2006

BORING LOG

BORING LOCATION: 30 feet east of excavation

BORING / WELL NO: MW-4
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Air Rotary
DATE STARTED: 6/03/04
DATE COMPLETED: 6/03/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: No Samples
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A M P L E T Y P E	R E C %	O V M (ppm)	S A M P L E T I M E	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
			75		950	Dark gray clayey silt, dry	
5						Buff clay with 15% fine to medium-grained subangular limestone gravel, dry	
10	10		30	0.0	1015		
15			30		1024	Pink friable limestone Buff limestone with 80% intergranular and 20% vuggy porosity	
			30		1032	Same as Above with 15% medium-grained angular to subangular gravel of light gray reworked limestone	
20	11			0.0			
			25		1045		
25						Light red fine-grained sand, moist	
						Light brown fine-grained sand, moist	
			100		1051		
30	12			2.3		Slightly lithified at 24.5 to 25 feet	

PAGE: 1 OF 3

BORING LOG

BORING / WELL NO: MW-4
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Air Rotary
DATE STARTED: 6/03/04
DATE COMPLETED: 6/03/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: No Samples
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N	R E C %	O V M (ppm)	S A T U R A T I O N	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
			100		1105	Light brown fine-grained sand, slightly moist	
35						Light reddish brown fine-grained sand	
			80		1113	Same as Above with 20% large subangular limestone (grainstone) gravel, slightly moist	
40	13			0.2			
			90		1125	Light reddish brown fine-grained sand Same as Above (slightly lithified)	
45						Light brown fine-grained sand, slightly moist	Lithified 46 to 47 feet
			95		1137		
50	14			0.6			
			90		1144	Same as Above with 25% subangular medium-grained sandstone gravel	
55						Same as Above becoming reddish brown, moist	Lithified 54 to 55 feet
			85		1158		
60	15			2.3		----- GROUNDWATER AT 59.5 feet -----	Moist at 58 feet

PAGE: 2 OF 3

BORING LOG

BORING / WELL NO: MW-4
PROJECT NO: F003-003

PROJECT NAME: Denton Gathering
PROJECT LOCATION: Denton Lease, Lea County, NM
DRILLING METHOD(s): Air Rotary
DATE STARTED: 6/03/04
DATE COMPLETED: 6/03/04

CLIENT: BP Pipelines NA
DRILLING CONTRACTOR: ECO Drilling
SAMPLE METHOD: No Samples
DRILLER: Mike H.
DELTA REP.: B. Summers

DEPTH (ft)	S A M P L E	S A T U R A T I O N %	R E C %	OVM (ppm)	S A T U R A T I O N %	SURFACE ELEVATION:	REMARKS
						LITHOLOGIC DESCRIPTION	
65			70		1216	Red Brown clayey sand, saturated Light brown fine-grained sand, wet	
65			80		1234	Clayey sand, saturated at 65 to 66 feet Same as Above but moist	
70						15 feet of pre-pack screen 2 feet of bentonite plug Grout to surface	
75							
80							
85							
90							

PAGE: 3 OF 3

TRANSACTION REPORT

P. 01

FEB-06-2006 MON 09:40 AM

FOR:

RECEIVE

DATE	START	SENDER	RX TIME	PAGES	TYPE	NOTE	M#	DP
FEB-06	09:34 AM	9726659989	5' 52"	19	RECEIVE	OK		
