GW - ___001___

TANK TESTING

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, August 23, 2012 9:24 AM
To: 'Schmaltz, Randy'
Cc: Weaver, Ron; Hawkins, Larry; Robinson, Kelly; Perrin, Charlie, EMNRD; VonGonten, Glenn, EMNRD
Subject: RE: Tank #12 Floor Replacement (GW-001)

Randy:

Good morning. The New Mexico Oil Conservation Division (OCD) has completed its review of the above subject submittal, which references API 650.

The OCD Discharge Permit (DP) "above ground tanks" provisions are provided below for reference.

The OCD hereby **approves** the Tank #12 Floor Replacement proposal. The OCD notices that any leakage from the tank would drain into the unlined berm area, which the OCD recommends also be lined.

Please report any tank leak discoveries (before and/or after construction from testing) and comply with the berm requirements stipulated in the DP below. In addition, please update the facility tank work schedule spreadsheet to reflect the retrofit date, etc.

Thank you.

Please be advised that OCD approval of this plan does not relieve Western Refining Southwest, Inc.- Bloomfield Refinery of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Western Refining Southwest, Inc.- Bloomfield Refinery of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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9. Above Ground Tanks: The owner/operator shall ensure that all above ground tanks have impermeable secondary containment (e.g., liners and berms) with leak detection systems. The owner/operator shall retrofit all existing secondary containment(s) before this discharge plan permit expires. The owner/operator may propose an alternate plan or schedule to accomplish the above to the OCD for approval within 3 months of permit issuance (see last paragraph in this section below). Tanks containing asphalt/pitch are exempt from the liner and leak detection requirement, but shall comply with the berm provision (1+1/3 volume) below. Tanks where fluids have been removed shall undergo an internal tank inspection and any leaks shall be reported to the OCD within 24 hours of having knowledge of a tank leak(s). All new tanks installed at the facility shall comply with the above requirements and be approved by the OCD. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

All new and existing above ground tanks containing chemicals must be placed or retrofitted over an impermeable pad (40-mil LLDPE reinforced liner with leak detection system) or liner system within a bermed secondary containment area approved by the OCD. The bermed areas shall be constructed to contain a volume of at least one and one-third (1+1/3) greater than the total volume of the largest tank and/or all interconnected tanks within a bermed containment area. Alternative secondary containment designs must be approved by the OCD.

To comply with the alternative plan or schedule above, the owner/operator shall submit a spreadsheet or table identifying all tanks with a work schedule to address this provision (Tank ID #, type of tank, new/used, volume, chemical stored, tank age, last Integrity test date, planned retrofit date and/or construction date, etc.) to the OCD for approval. The owner operator shall prioritize existing tanks for retrofit based on the toxicity and solubility (contaminant transport potential) of chemicals (BTEX, JP4, etc.) and site-specific threats to public health, safety, fresh water, and the environment. A work schedule with a phased approach extending beyond the standard 5-Year permit period may be approved by the OCD if the table is submitted within 3 months of permit issuance. The table(s) shall be considered approved if the OCD does not respond within 30 days of receipt of the table and work schedule.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive, Santa Fe, New Mexico 87505
Office: (505) 476-3490
E-mail: CarlJ.Chavez@State.NM.US
Website: http://www.emnrd.state.nm.us/ocd/
"Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?" To see how, please go to: "Pollution Prevention & Waste Minimization" at
http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental

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From: Schmaltz, Randy [mailto:Randy.Schmaltz@wnr.com]
Sent: Thursday, August 23, 2012 7:21 AM
To: Chavez, Carl J, EMNRD
Cc: Weaver, Ron; Hawkins, Larry; Robinson, Kelly
Subject: Tank #12 Floor Replacement

Carl,

Good Morning, Western Refining Southwest, Inc.- Bloomfield Refinery is seeking OCD's approval to install a new floor in Storage Tank #12. Western proposes to install an 80 mil HDPE liner with welded seams on top of the existing metal floor. A four inch concrete slab with leak detection slots will then be poured on top of the HDPE liner. Once cured a new metal floor will be installed on top of the concrete. I have included drawings provided by the contractor, and a statement from a Certified Engineer that this installation is being done in accordance with API 650 procedures and standard industry practices.

You may recall that this is the same procedure that OCD approved in May 2010 for the new floor that Western installed in Tank #13.

Your prompt attention to this matter is greatly appreciated!

Randy Schmaltz
Health, Safety, Environmental and Regulatory Director

Western Refining Southwest, Inc.
#111 County Road 4990
Bloomfield, New Mexico 87413
(505) 632-4171
Cell (505) 320-6989
email: randy.schmaltz@wnr.com

LANDMARK

August 22, 2012

Landmark Structures

301 South County Farm Road, Suite C
Wheaton, Illinois 60187-4523
630.909.4000 Phone
817.439.9001 Fax

www.teamlandmark.com

Western Refining
50 County Road 4990
Bloomfield, NM 87413

Attn: Mr. Larry Hawkins
Operations Supervisor

Re: Western Refining / Bloomfield, NM
Landmark Job No. 1362
Tank 12 Bottom Repairs
"El Segundo" Style Bottom

Dear Mr. Hawkins:

Landmark is currently making repairs to Tank 12 at your Bloomfield, NM facility. The repairs will result in an "El Segundo" style bottom that consists of an HDPE liner over the existing tank bottom, four inches of Fibercrete Concrete and a new ¼ inch carbon steel bottom.

This is consistent with Figure I-4 of API 650 Appendix I.

This bottom style is well-established in the industry and has the benefits of leak detection without the need for cathodic protection between the steel bottoms.

JOHN E. GRENDZINSKI
NEW MEXICO
18036
PROFESSIONAL ENGINEER

Sincerely,

08-22-12

John E. Grendzinski, P.E.

LANDMARK TANK SERVICES
1665 Harmon Road
Fort Worth, Texas 76177
(817) 439-8888
Fax (817) 439-9001

LETTER OF TRANSMITTAL

Date	Job. No.
8/14/2012	1362
Attn: Larry Hawkins	
Re: Tank 12 Bottom Repairs	

TO: Western Refining

50 County Road 4990

Bloomfield, NM 87413

WE ARE SENDING YOU THE ATTACHED ITEMS:

Copies	Spec Section	Article No.	Submittal No.	Description
1	n/a	n/a	01a	Revised Drawings Tank 12 Tell Tale Installation Tank Sump Detail Model

THESE ARE BEING TRANSMITTED:

__x__ Information for Record

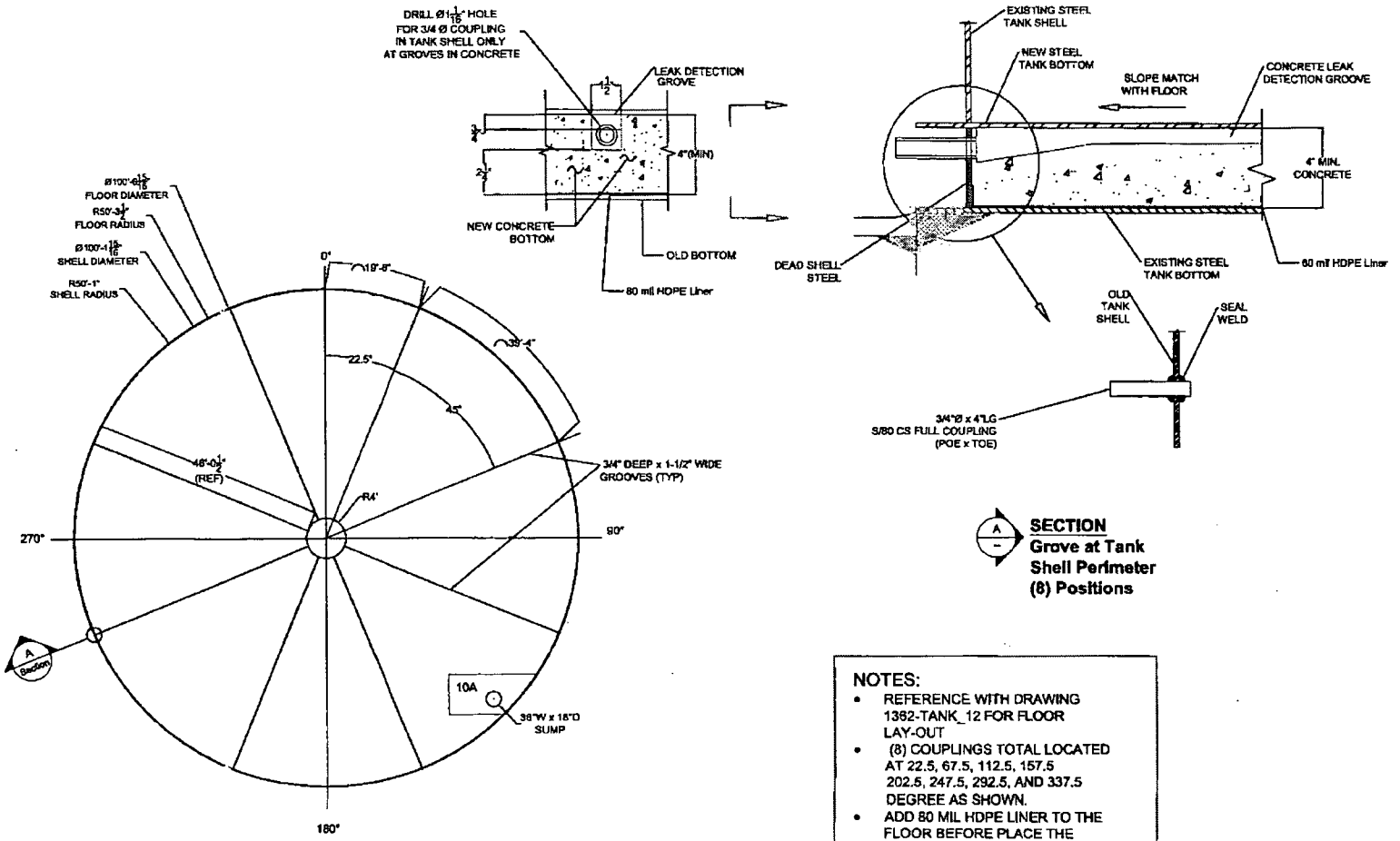
____ Information for Engineer's Approval

____ Return 1 Copy

CERTIFICATION:
This information has been reviewed and determined to be in compliance with the contract documents including plans and specifications as modified by addenda, change orders and field orders. Any exceptions to the contract documents are noted below.

EXCEPTIONS / REMARKS:
See revised drawings

Signed _____ *Project Manager*
Brandon Mann



PLAN VIEW

A – **SECTION**
Grove at Tank Shell Perimeter (8) Positions

NOTES:
- REFERENCE WITH DRAWING 1362-TANK_12 FOR FLOOR LAY-OUT
- (8) COUPLINGS TOTAL LOCATED AT 22.5, 67.5, 112.5, 157.5 202.5, 247.5, 292.5, AND 337.5 DEGREE AS SHOWN.
- ADD 80 MIL HDPE LINER TO THE FLOOR BEFORE PLACE THE CONCRETE.

LANDMARK
1665 Hannon Road, Ft. Worth, TX. 76177 817-439-9002

Rev.	Revision Description	Date
1	Add 80 mil HDPE Liner	8/14/2012
Submit	Approved by	Date
N.I.R.		8/14/12

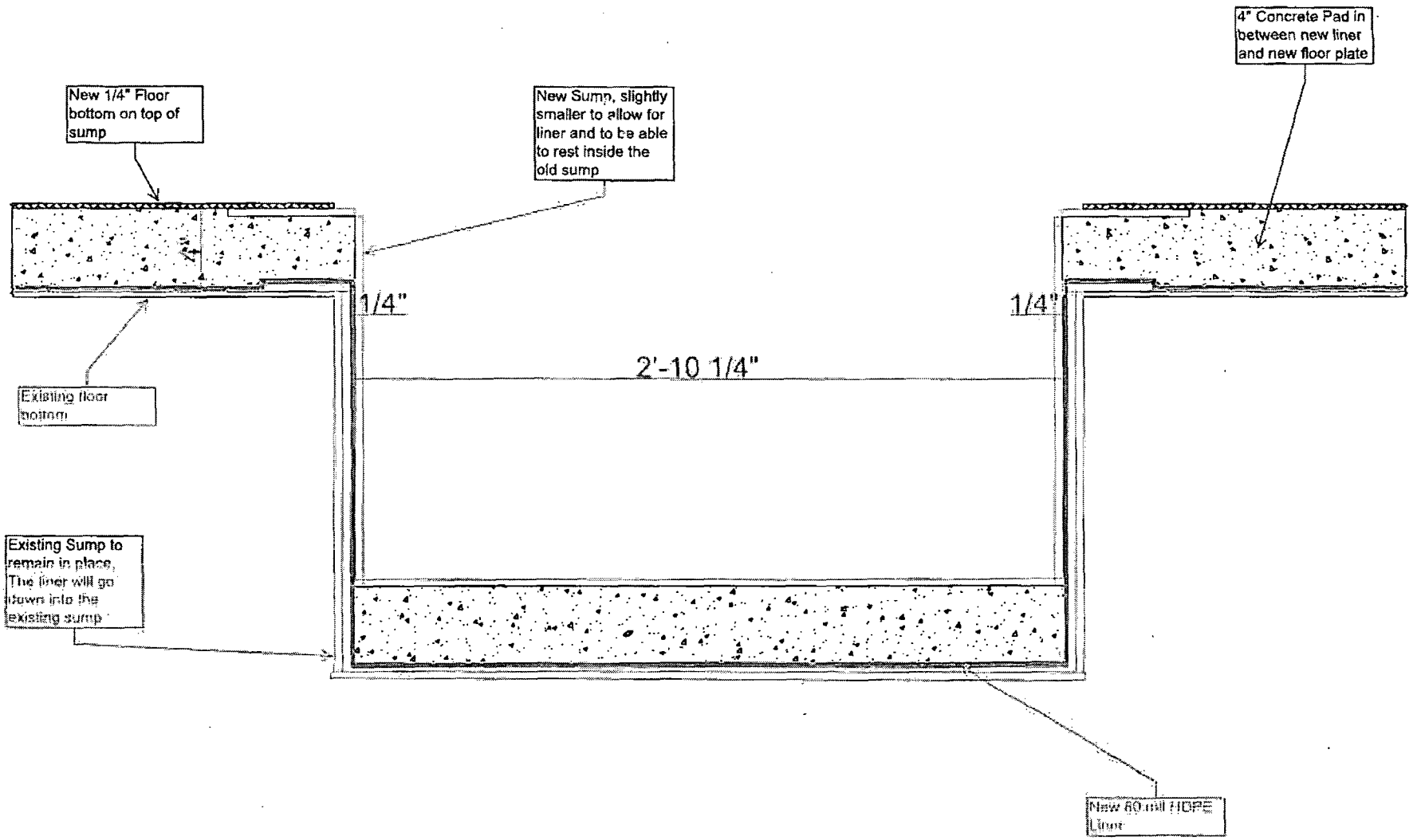
Floor Layout

JOB 1362 BLOOMFIELD, NM. TANK 12 LEAK DETECTION

Date: 8/14/12
Scale: N/A
Chk.: JDN
Dwn.: KHN

1362-R2

Tank 12 new sump detail



NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 22, 2012

Mr. Randy Schmaltz
Environmental Manager
Western Refining, Southwest, Inc.
Bloomfield Refinery
P.O. Box 159
Bloomfield, New Mexico 87413

RE: APPROVAL
DECOMMISSIONING OF DIESEL AST AND DISPENSER PUMPS
WESTERN REFINING SOUTHWEST INC., BLOOMFIELD REFINERY
EPA ID# NMD089416416
HWB-WRB-10-001

Dear Mr. Schmaltz:

The New Mexico Environment Department (NMED) has received Western Refining Southwest, Inc., Bloomfield Refinery's (Western) *Decommissioning of Diesel AST and Dispenser Pumps* (Response) dated June 13, 2012. NMED has reviewed the Response and hereby issues this approval with the following comment.

Comment 1

Western must include the analysis of semi-volatile organic compounds (SVOCs) for any soil confirmation sample collected if the analytical results for diesel range organics (DRO) are greater than 800 ppm. Western must submit the Accelerated Corrective Measures Completion Report to NMED by **December 31, 2013**.

If you have any questions regarding this letter, please contact Leona Tsinnajinnie of my staff at (505) 476-6057.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
L. Tsinnajinnie, NMED HWB
C. Chavez, OCD
A. Hains, Western Refining Company, El Paso, Texas

File: HWB-WRB-10-001 and Reading 2012

CERTIFIED MAIL # 7007 0220 0004 0187 1340

September 28, 2010

Carl Chavez
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Discharge Permit (GW-001)
Western Refining Southwest, Inc.-Bloomfield Refinery
Discharge Permit Approval Conditions, Supplemental Plans

Dear Mr. Chavez:

Please find enclosed Western Refining Southwest, Inc. - Bloomfield Refinery's (Western) Supplemental plans as required to address the Discharge Permit Approval Conditions.

Condition 9

Above Ground Tanks: *The owner/operator shall ensure that all above ground tanks have impermeable secondary containment (e.g., liners and berms) with leak detection systems. The owner/operator shall retrofit all existing secondary containment(s) before this discharge plan permit expires. The owner/operator may propose an alternate plan or schedule to accomplish the above to the OCD within 3 months of permit (see last paragraph in this section below).*

Response to Condition 9

Alternate Plan: Western proposes the following plan for accomplishing impermeable secondary containment on existing above ground liquid storage tanks:

1. All large liquid storage tanks (> 10,000 gallons) will be gauged, and recorded twice per day, once per shift. The tank gauging will alert Western immediately to any possible liquid storage tank failures.
2. Western will install secondary bottoms with leak detection on tanks found through the API 653 Inspection program, that have floors that are no longer serviceable. The current Tank – Inspection and Repair Schedule spreadsheet that is used to comply with the OCD Stipulated Final Order is included as (Attachment A).
3. Western will compact soil in the earthen secondary containments at the time of tank inspections.
4. Western will compact soil in the earthen secondary containment of the smaller sized liquid storage tanks less than 10,000 gallons.

50 County Road 4990, Bloomfield, New Mexico 87413 • 505 632-4101 • www.wnr.com

5. All new liquid storage tanks will be constructed with an impermeable pad (40-mil/or greater HDPE or LLDPE) or liner system within a bermed secondary containment area approved by the OCD.

Condition 17.C.1.

***North and South Double-Lined Waste water Evaporation Ponds**: The operator shall also maintain an Action Plan with a system design diagram with leak detection system(s) that will confirm leakage or system failure, and list corrective actions for remedying any discharge(s) from the ponds in order to protect public health and the environment. A copy of the Action Plan shall be submitted to the OCD within 3 months of permit issuance. OCD shall be notified within 24 hours any time the plan is implemented.*

Response to Condition 17.C.1.

North and South Evaporation Pond Action Plan: The Action Plan is included as (Attachment B).

Condition 17.C.2.

***North and South Aeration Lagoons:** The operator shall also maintain an Action Plan with a system design diagram with leak detection system(s) that will confirm leakage or system failure, and list corrective actions for remedying any discharge(s) from the ponds in order to protect public health and the environment. A copy of the Action Plan shall be submitted to the OCD within 3 months of permit issuance. OCD shall be notified within 24 hours any time the plan is implemented.*

Response to Condition 17.C.2.

North and South Aeration Lagoons Action Plan: The Action Plan is included as (Attachment C).

Condition 17.G.

***Emergency River Contingency Plan:** An emergency river contingency plan with corrective action steps shall be developed submitted to OCD within 3 months of permit issuance with annual environmental response training of appropriate refinery emergency personnel with coordination with the Local Emergency Planning Committee (LEPC) in the event of a release of pollutants from the bluff (residual oil seeps) and to "Waters of the State." Personnel shall be trained in corrective actions annually to respond quickly and safely to any release to "Waters of the State" from the facility and for the protection of nearby public health, safety and the environment. The Operator shall have adequate emergency personnel, response equipment (i.e., sufficient number and size of booms with at least one set of replacements based on chemicals of concern), anchor points along the river, watercraft, etc. to contain and remediate any discharges to the river.*

Response to Condition 17.G.

Emergency River Contingency Plan: The Emergency River Contingency Plan has been developed and is maintained at the refinery main office and is available at anytime for agency inspection.

Condition 24

***Closure Plan and Financial Assurance**: Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify the OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator shall submit an approved closure plan, or modify an existing plan, and/or provide adequate financial assurance. Provide an itemized closure plan with cost estimates outlining the complete closure or decommissioning of the facility with 30 year remediation and post monitoring period to the OCD for approval within 6 months of permit issuance.*

Response to Condition 24

Closure Plan and Financial Assurance: The Closure Plan will be addressed within 6 months of permit issuance.

Should you have questions or would like to discuss these comments further, please contact Randy Schmaltz at (505) 632-4171.

Sincerely,

Victor McDaniel
Site Manager
Bloomfield Refinery

cc: Randy Schmaltz – Western Refining-Bloomfield Refinery

ATTACHMENT A

BLOOMFIELD REFINERY TANKS - Inspection & Repair Schedule (*schedule set according to API 650 & 653)

Tank #	Service	Normal Capacity (bbls)	Last Test/ Inspection	Test/ Inspection Method	Next Test/ Inspection Scheduled	Date OCD-SFO Requirements Satisfied	Test/ Inspection Date	Repairs/Maint Needed	Repairs/Maint Completion Date
2	FILTERED WATER	64,347	2000	Internal	2010	2010	3/30/2000	Cleaned Out Sediment	3/28/2000
3	MID-GRADE	9,365	2003	Internal	2013	2013	10/1/2003	Seal Replacement	10/8/2003
4	MID-GRADE	9,365	2003	Internal	2013	2013	9/17/2003	Seal Replacement	9/24/2003
5	WASTE WATER SURGE	9096	2007	Internal	2017	2007	5/28/2008	None	N/A
8	CRUDE SLOP	460	2007	Internal	2017	2007	6/7/2007	None	N/A
9	CRUDE SLOP	460	2007	External (Conrete Liner)	2017	2007	11/10/07	None	N/A
10	SPENT CAUSTIC	360	2007	Internal	2017	2007	8/24/2007	Repaired Hatch & Floor	8/22/2007
11	LOW REFORMATE	50,358	2002	Internal	2012	2012	9/11/2002	Seal Replacement	9/18/2002
12	CAT / POLY GAS	50,358	1999	Internal	2010	2010	10/28/1999	Seal Replacement	11/12/1999
13	UNLEAD SALES	27,646	2008	Internal	2018	2008	2/20/2008	Seal Repair	2/28/2008
14	UNLEAD SALES	27,615	2005	Internal	2015	2005	9/21/2005	None	N/A
17	CAT FEED	38403	2007	Internal	2017	2007	7/8/2007	Floor Repair	7/29/2007
18	#1 DIESEL SALES	50358	1999	Internal	2010	2010	8/1/1999	Seal Replacement & Floor Repair	8/1/1999
19	#2 DIESEL SALES	34991	2000	Internal	2010	2010	06/22/00	Roof Replacement	6/20/2000
20	NAPHTHA	10000	2007	Internal	2017	2007	10/29/07	New Construction	N/A
23	BASE GASOLINE	38,402	2002	Internal	2012	2012	08/12/02	Seal Repair	8/11/2002
24	ULS DIESEL	10107	2006	Internal	2016	2006	03/01/06	New Construction	N/A
25	ULS DIESEL	10107	2006	Internal	2016	2006	02/06/06	New Construction	N/A
26	SWEET NAPHTHA	3,264	2008	Praxair	2018	2008	05/29/08	None	N/A
27	HEAVY BURNER FUEL	9,854	2006	Internal	2016	2006	08/31/06	Floor Repair	8/21/2006
28	CRUDE	77,854	2009	Internal	2019	2009	11/09/09	None	N/A
29	#2 DIESEL/FCC SLOP	16,676	2005	Internal	2015	2005	04/25/05	Repair Auto Gauge & Install Sample Port	4/23/2005
30	PREMIUM UNLEAD BLEND	16,676	2004	Internal	2014	2004	12/20/04	Repair Seal & Pontoon	12/19/2004
31	CRUDE	98,676	2003	Internal	2013	2013	01/09/03	Repair Roof Drain	1/8/2003
32	PREMIUM UNLEAD SALES	17,913	1999	Internal/UTS*	2019	2009	04/01/09	None	N/A
33	RECOVERY WELL WATER	360	2008	Internal	2018	2008	04/09/08	None	N/A
34	INJECTION WELL RESERVIOR	360	2002	Internal	2012	2012	11/20/02	Repair Pinhole	1/20/2002
35	REFORMER FEED	43904	2005	Internal	2015	2005	08/29/05	Repair Seal & Recoat Roof	8/28/2008
36	CAT / POLY GAS	43904	2005	Internal	2015	2005	08/24/05	None	N/A
37	FRENCH DRAIN	121	2009	Internal/UTS*	2019	2009	06/11/09	None	N/A
38	EAST OUTFALL	302	2003	Internal	2013	2013	04/09/08	None	N/A
41	CRUDE STORAGE	2798	2008	Praxair	2018	2008	05/29/08	None	N/A
42A	TERMINALS SLOP	400	2007	API 650	2017	2007	06/01/07	New Construction	N/A
42B	TERMINALS SLOP	400	2007	API 650	2017	2007	06/01/07	New Construction	N/A
43	TERMINALS SLOP	560	O/S	O/S	O/S	O/S	O/S	Out of Service	O/S
44	VRU NAPHTHA	1,751	2008	Praxair	2018	2008	05/29/08	None	N/A
45	ETHANOL	4821	2008	Internal	2018	2008	02/20/08	None	N/A

* UTS = Utransonic Thickness Survey

ATTACHMENT B

Purpose and Scope

This Action Plan describes procedures and actions that are implemented during normal operations as well as response actions that will be implemented in the event of a discovered leak to the environment from one of the Aeration Lagoons.

Background

The refinery is located in northwestern New Mexico, approximately 1 mile south of the City of Bloomfield in San Juan County. It is more specifically located approximately 1/2 mile east of US HWY 550/SR 44 on County Road 4990 (a.k.a. Sullivan Road).

The refinery is situated on an elevated terrace south of the San Juan River and the Hammond Irrigation Ditch. This terrace rises approximately 100 feet above the river level and 20 feet above the irrigation ditch. An underground slurry wall (North Barrier Boundary Wall) with Tank #37 groundwater collection system is situated north of the Hammond Irrigation Ditch (see attached site plan). This collection system serves as a total fluids collection system for the western portion of the refinery which includes the area surrounding the aeration lagoons.

The essential function of the North and South Aeration Lagoons is aggressive biological treatment (ABT) of used process water. The water is generated at various refinery units, storage tanks, utility systems, and maintenance activities. This water is collected in a segregated sewer system located throughout the refinery units and tankage areas. Used process water flows to the API Separator where solids, sludge, and floating scum are removed. API Separator effluent is then pumped through the Benzene Strippers and then flows onward through a series of three lined aeration lagoons. Water is then either evaporated at the evaporation ponds or injected underground at the Class I injection well.

In 1974, the aeration lagoons were constructed with bentonite-treated bottoms for fresh water holding. After the initiation of the Clean Water Act (40CFR Part 419), the ponds were converted to manage API Separator water as a secondary biological treatment of the water. In 1982/83 the first clean out of these biological treatment oily water ponds occurred and a liner and leachate system was installed that consisted of a 33% bentonite composite liner equipped with a French drain system, with a 100-ml high density polyethylene (HDPE) liner on top. Around 1990, the lagoons were upgraded and retrofitted with two additional liners and a leak detection/leachate collection system over and above the cleaned 1982/83 system. In 2007, a benzene stripper/tank system was constructed and put into service to treat all water prior to entering the first aeration lagoon. After the installation of the benzene strippers and throughout the fourth quarter of 2008 and the first quarter of 2009, the lagoons were cleaned out and each lagoon's primary liner was inspected and repaired at that time.

The Aeration Lagoons from top to bottom, include a 100-mil HDPE top liner, a geonet for collecting leaks to a sump equipped with a 6" observation pipe, a 60-ml HDPE

secondary liner, a composite geotextile/geonet with a 4" observation pipe, a cement amended sand that was compacted into a 1.5% slope, a 100-ml HDPE liner, a French drain system which directs any collected fluids to a central sump, and a 6" layer of soil with 33% bentonite mixed into it.

The South Lagoon (#1 AL) averages 4.4 feet in depth and has a surface area of about 6,652 square feet. The total volume is approximately 216,000 gallons. At a flow rate of 80 gpm, the holding time in the pond is 1.9 days. This lagoon is equipped with two, 5 horsepower aspirating aerators sized to prevent F037/F038 waste generation.

The Northwest Lagoon (#2 AL) averages 5.5 feet in depth with a surface area of 10,000 square feet. This lagoon is equipped with two 2-horsepower aerators and water retention time (at 80 gpm) is 3.6 days. The Northeast Lagoon (#3 AL) averages 5.7 feet in depth, with a surface area of 8,440 square feet and a volume of approximately 360,000 gallons. This lagoon is equipped with two 2-horsepower aerators and wastewater retention time (at 80 gpm) of 3.1 days.

Leak Detection System

Each of the three Aeration Lagoons is constructed with 4 impermeable liners that are equipped with a three-tier leak detection system that allows for fluids monitoring between each of the lagoon liners and can provide confirmation of a leak before a discharge to groundwater. Each lagoon has a 6" detection tube placed between the primary and secondary liner as well as a 4" detection tube placed between the second and third liner. Below the third liner of each pond is a French drain system that empties to a single culvert located just east of the South Aeration Lagoon. Below the French drain is a layer of composite soil consisting of 33% bentonite (see attached as-built drawing).

Monitoring and Discovery

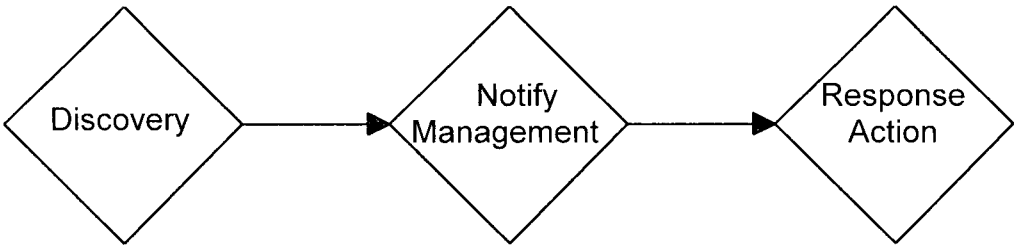
The leak detection tube system is measured with an inter-face probe on a bi-weekly basis. Visual inspection of the east leak detection culvert, which houses the outlet of the French drain located beneath the bottom liner, also occurs bi-weekly. Visual inspection of the freeboard and operation of the aeration lagoons occurs daily. The refinery is staffed 24 hours per day, 365 days per year. A Shift Supervisor, or designated representative, is always on duty at the refinery.

Baseline detection levels were established after the 2009 aeration lagoon cleanout and liner repair. Depth-to-fluid levels of less than 9 feet in either the 6" and 4" detection tubes of the #1 AL indicate a potential leak in the liner. The baseline level for the #2 AL was established as 18.5 feet in the 6" tube and dry in the 4" tube. Both detection tubes are dry in the #3 AL. If fluid is detected at a level less than 9 feet below the top of any leak detection tube, the Shift Supervisor and/or Environmental Manager is notified. To ensure the potential leak does not extend below the third protective liner, fluids may be removed from the 6-inch and/or 4-inch leak detection tube using a vacuum truck and/or diaphragm pump.

The discovery of fluids from the French drain system via the leak detection culvert and supporting data of depth-to-fluid levels in the detection tubes will result in notification to the Environmental Manager to determine appropriate response action.

If a leak or discharge from any one of the Aeration Lagoons is discovered, the employee shall immediately perform the following actions.

1. Note the nature and location of the discharge/leak.
2. Notify the on-duty Shift Supervisor and/or the Environmental Manager
3. Response action will then be determined.



The on-duty Shift Supervisor is the central point of contact in the discovery of a discharge/leak.

Response Action

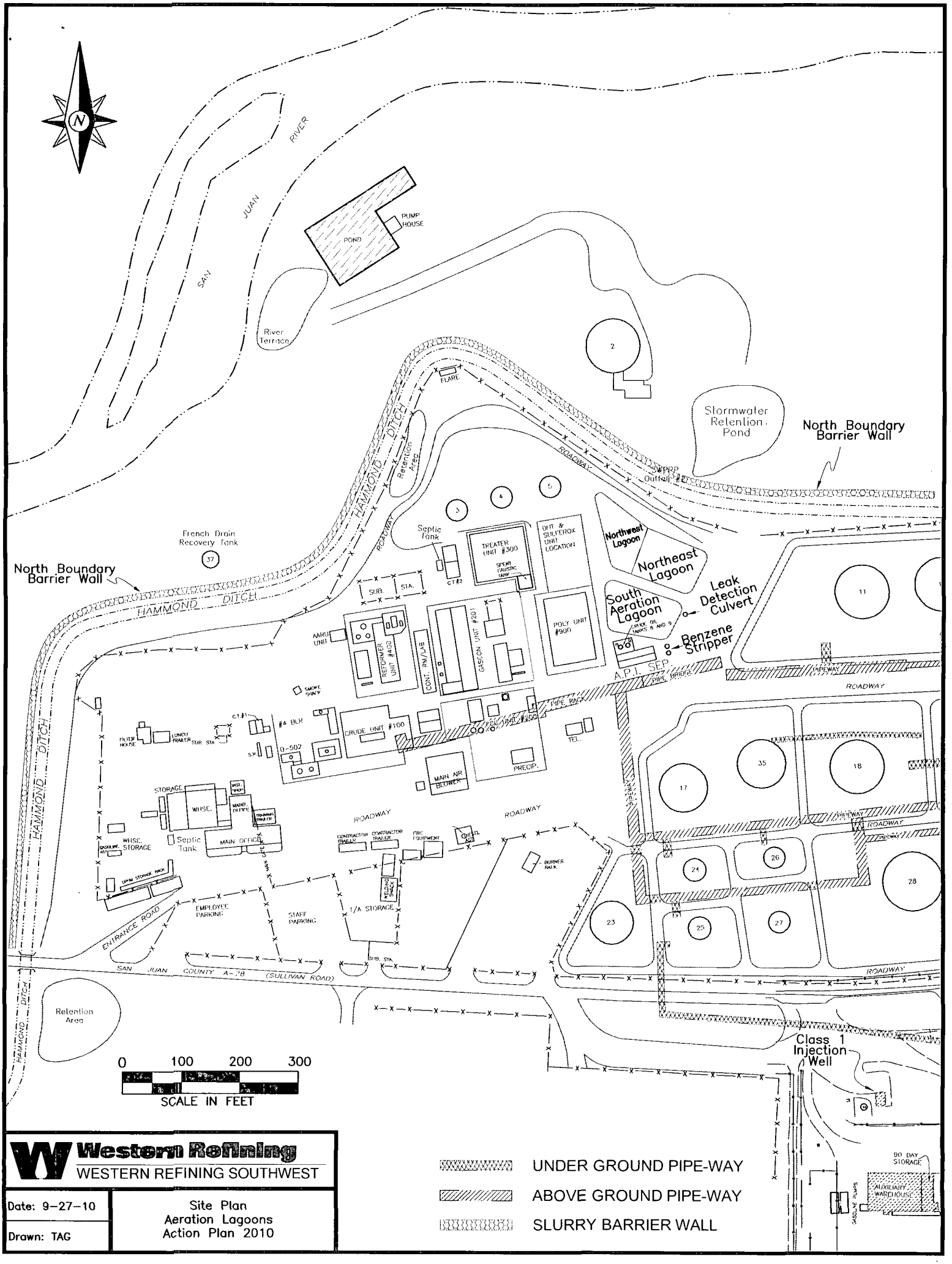
In the event that there is an indication of a release to the environment from the Aeration Lagoons via a surface overflow or measurable fluid detection below the third liner of either pond via the leak detection culvert, OCD will be notified and this Action Plan will be implemented via the appropriate response action(s).

In the event of an aeration lagoon surface overflow... guidelines from Annex 10 (Spill Prevention Control and Countermeasures Plan) of the Integrated Contingency Plan for the Refinery will be followed. A copy of this Plan is maintained on-site and includes actions to be performed to minimize and contain surface impacts. Used process water from the API will be diverted to Tank 5 for temporary storage, thereby ceasing further discharge to the aeration lagoons. The fluid level in the over-filled pond will be lowered using a pump and/or vacuum truck. The pond will not be placed back into service until the fluid level is lowered below the minimum 3-foot freeboard level. Once the aeration ponds can be returned to normal operating service, fluid diverted to Tank 5 will be pumped back to the API for treatment.

In the event fluid is detected below the third pond liner via the French Drain System and leak detection culvert....the affected aeration lagoon will be bypassed and the water process will discharge sequentially into the other two aeration lagoons. All fluids from the leaking aeration lagoon will be pumped out so the liner

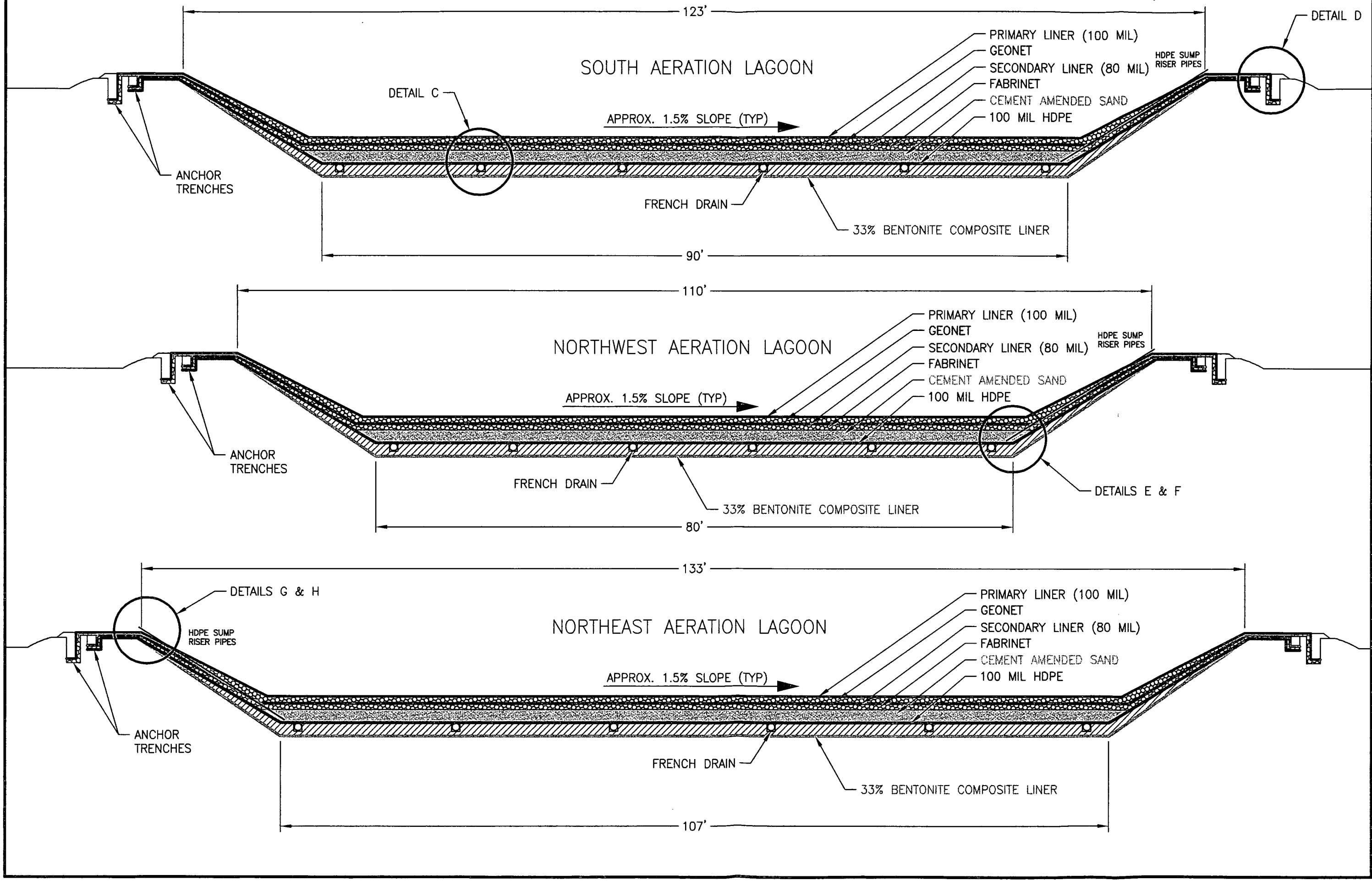
can be inspected and repaired. The lagoon will not be returned to service until the repairs are completed.

Any fluid release from the aeration lagoon ponds via a leak from the bottom pond liner is ultimately captured by the North Boundary Barrier Collection System. All fluid below the Refinery process units, which includes the area surrounding the Aeration Lagoons, is hydraulically contained on-site via the 2,700 foot long North Boundary Barrier Wall. Hydraulic relief along the barrier wall is controlled via a French drain system located below the Hammond Ditch which discharges into the Tank #37 groundwater collection system. All fluids from Tank #37 are pumped to the API Separator for treatment.



Western Refining
WESTERN REFINING SOUTHWEST

Date: 9-27-10	Site Plan Aeration Lagoons Action Plan 2010
Drawn: TAG	



ERM-Rocky Mountain, Inc.
5950 South Willow Drive
Suite 200
Greenwood Villiage, Colorado 80111-8144
ERM (303)-741-8050

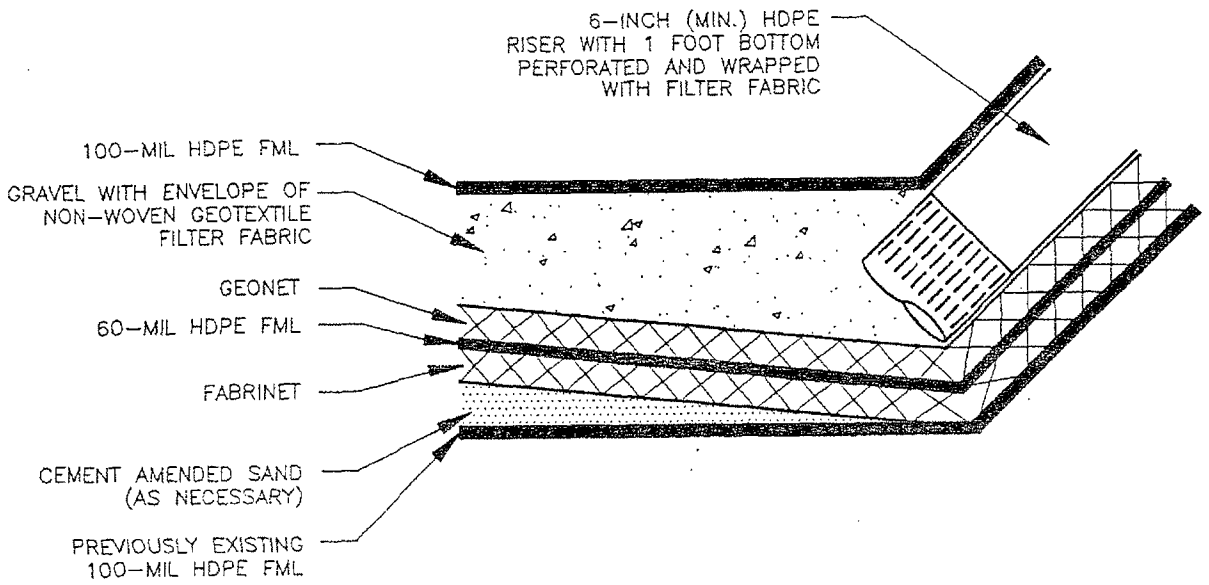
BLOOMFIELD REFINING COMPANY
BLOOMFIELD, NEW MEXICO 87413

CROSS-SECTIONAL VIEW

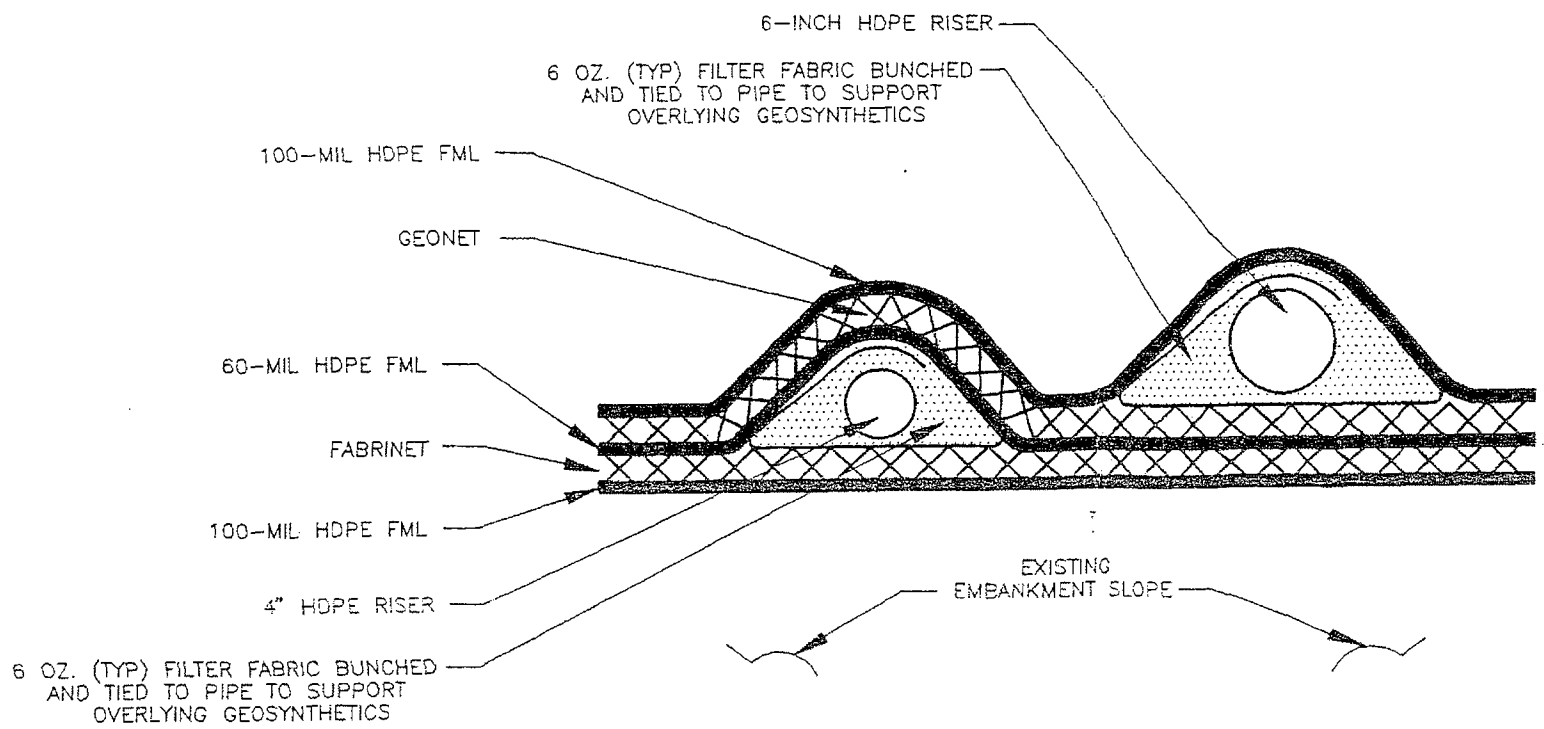
RECORD DRAWING FOR COMPLETED SURFACE IMPOUNDMENT RETROFIT

DESIGNED	BLOOMFIELD
DRAWN	SRL
CHECKED	
DATE	09/23/94
JOB NO.	931044.0
FILENAME	FIG-2

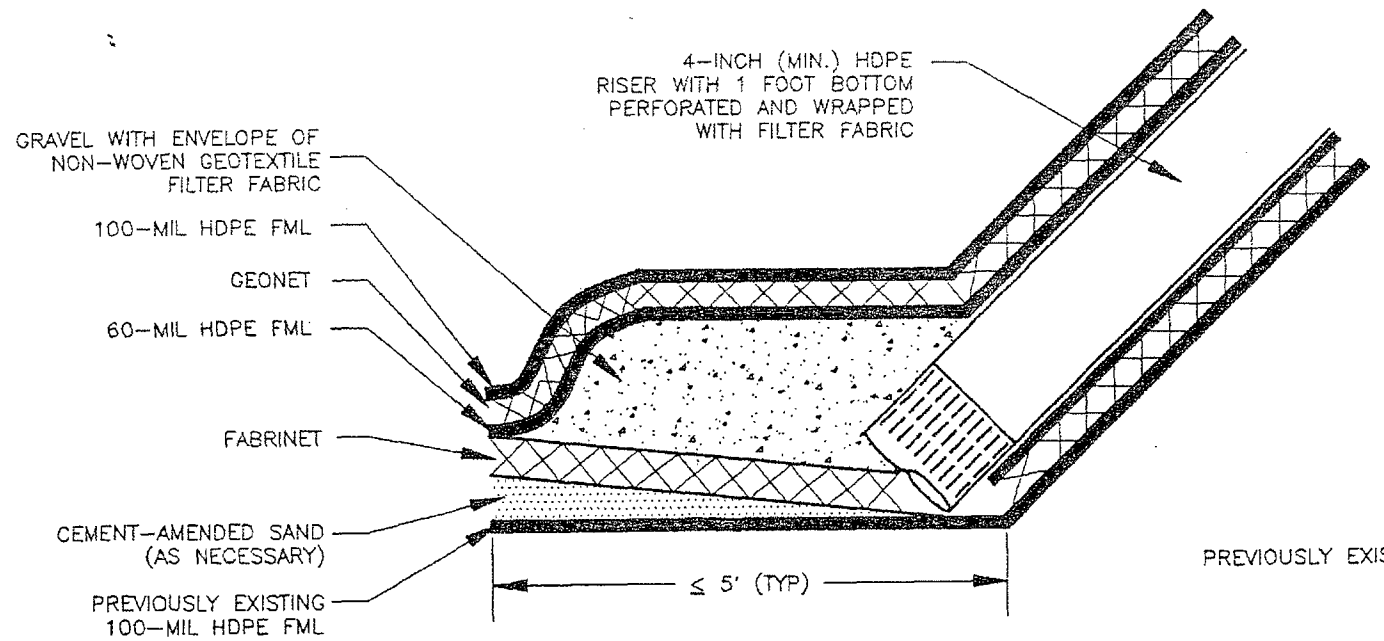
FIGURE
2



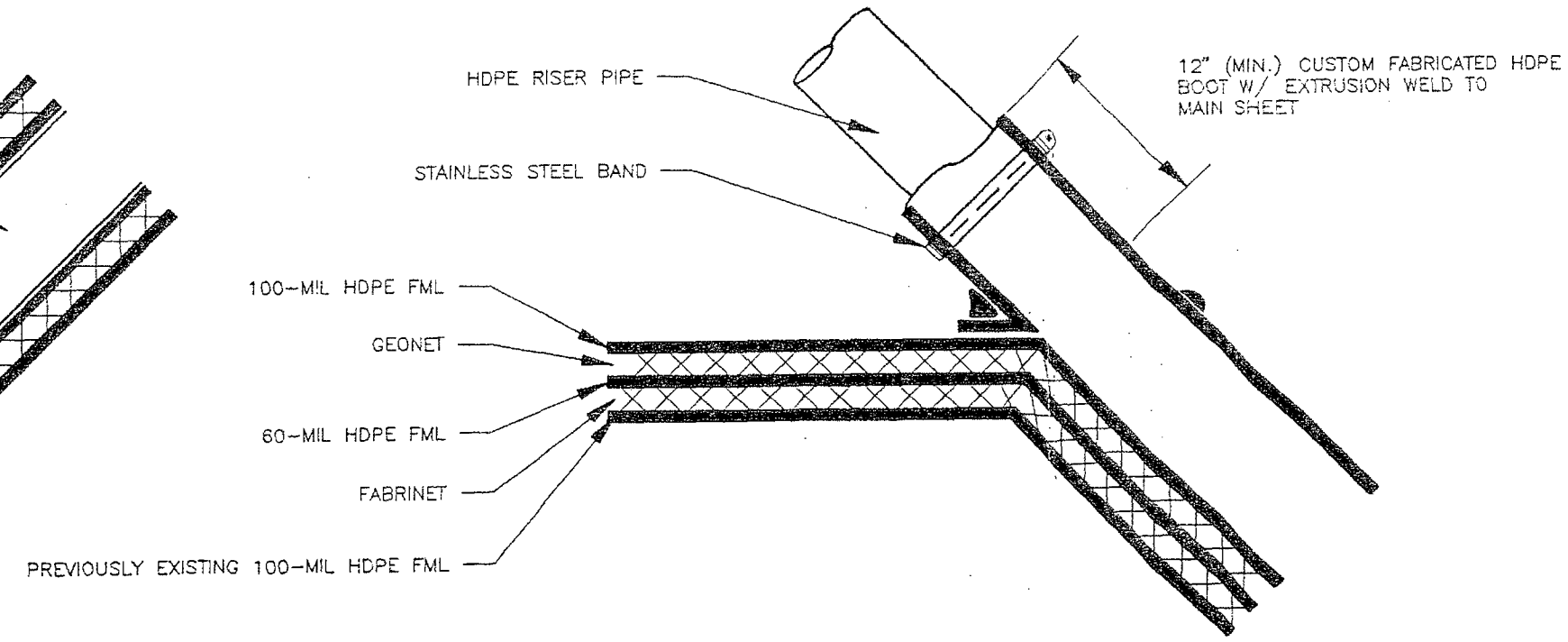
PRIMARY LEAK DETECTION SUMP DETAIL
DETAIL E (TYP)
(N.T.S.)



RISER PIPE CONFIGURATION
DETAIL G (TYP)
(N.T.S.)



SECONDARY LEAK DETECTION SUMP DETAIL
DETAIL F (TYP)
(N.T.S.)



RISER PIPE LINER BOOT
DETAIL H (TYP)
(N.T.S.)

REV	REVISION DESCRIPTION	DATE

ERM
HRM-Rocky Mountain, Inc.
9920 South Willow Drive
Suite 200
Greenwood Village, Colorado 80111-5144
(303) 741-3200

BLOOMFIELD REFINING COMPANY
BLOOMFIELD, NEW MEXICO 87413

SYSTEM DETAILS
RECORD DRAWING FOR COMPLETED
SURFACE IMPOUNDMENT RETROFIT

DESIGNED	BLOOMFIELD	
DRAWN	SRL	09/23/94
CHECKED	DATE	9310044.0
JOB NO.		FIG-4
FILENAME		

FIGURE
4

ATTACHMENT C

North and South Evaporation Ponds Action Plan 2010

Purpose and Scope

This action plan describes procedures and actions that are implemented during normal operations as well as response actions that will be implemented in the event of a discovered leak to the environment from either the North or South Evaporation Pond.

Background

The refinery is located in northwestern New Mexico, approximately 1 mile south of the City of Bloomfield in San Juan County. It is more specifically located approximately 1/2 mile east of State Route 44 on County Road 4990 (a.k.a. Sullivan Road).

The refinery is situated on an elevated terrace south of the San Juan River and the Hammond Irrigation Ditch. This terrace is approximately 100 feet above the river level and 20 feet above the irrigation ditch. The North and South Evaporation Ponds are located in the southeastern most corner of the active portion of the refinery property (see attached site map).

The essential function of the North and South Evaporation Ponds is temporary storage and evaporation of treated used process water. The water is generated at various refinery units, storage tanks, utility systems, and maintenance activities. This used process water is rendered non-hazardous as it flows through the API Separator (solids, sludge, and floating scum are removed), the Benzene Strippers (benzene is removed), and the three lined aeration lagoons (active biological treatment) before reaching either the evaporation ponds or the Class I injection well. Typically, the water is routinely pumped directly from the refinery aeration lagoons to the Class I injection well, thereby bypassing the evaporation ponds. Water levels in the ponds are directly proportional to the operation of the refinery and scheduled maintenance of the injection well.

The ponds were constructed in 1995 as double lined (60-millimeter high density polyethylene) surface impoundments with each pond covering approximately 4.5 acres. The leak detection system in each pond consists of an arrangement of 4" perforated PVC pipe placed between the first and second liners collecting and directing leaks to two separate 8" leak detection wells (see attached as-built diagrams).

Monitoring and Discovery

Using an inter-face probe, depth-to-fluid measurements are collected and recorded at each of the leak detection wells on a bi-weekly basis.

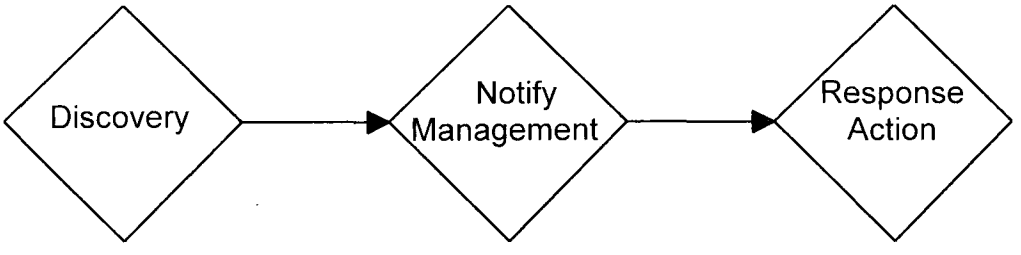
The refinery is staffed 24 hours per day, 365 days per year. A Shift Supervisor, or designated representative, is always on duty at the refinery. Visual inspection of the freeboard, dikes, and operation of the evaporation ponds occurs daily. Visual inspection of the area surrounding the evaporation ponds, including the face of each pond dike, is conducted bi-weekly.

The design and construction of the ponds allows for confirmed determination of a leak through visual inspections of the dikes and surrounding area. Water appearing on the face of the dikes could indicate that the second liner is leaking. As shown on the attached Evaporation Pond Elevation Drawing, the dike surface extends approximately 11 feet below the bottom of the South Evaporation Pond liner. It is anticipated that any leak to groundwater from the South Evaporation Pond would appear on the face of the South Pond dike surface. Similarly, the North Pond dike surface extends below the bottom of the North Pond liner and any leak to groundwater from that pond would be visually apparent along the face of the dike.

The discovery of fluids along the face of either dike will result in notification to the Shift Supervisor and/or Environmental Manager to determine an appropriate response action.

If a visual leak from any one of the Evaporation Ponds is discovered, the employee shall immediately perform the following actions.

1. Note the nature and location of the discharge/leak.
2. Notify the on-duty Shift Supervisor and/or the Environmental Manager
3. Response action will then be determined.



The on-duty Shift Supervisor is the central point of contact in the discovery of a discharge/leak.

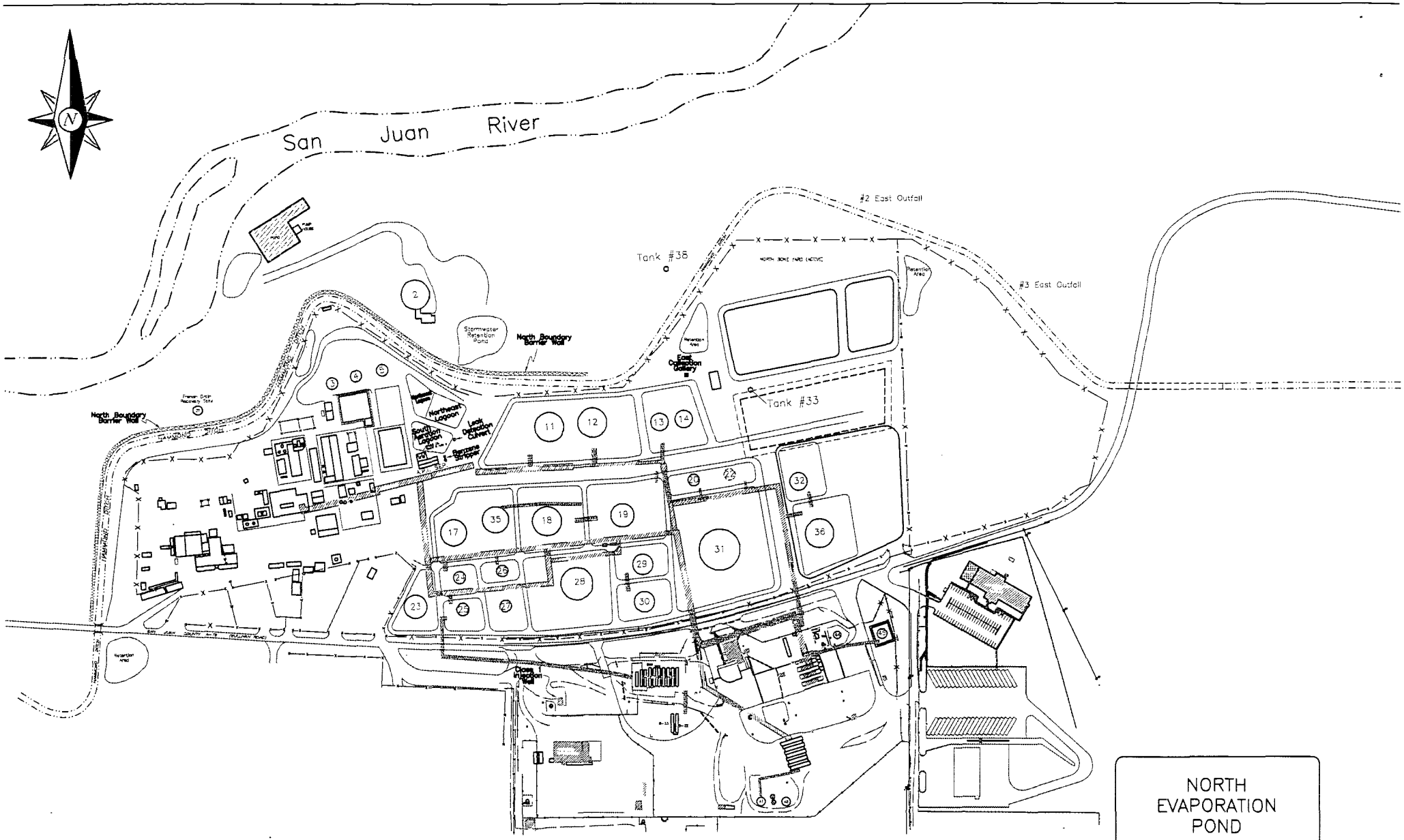
Response Action

In the event that there is an indication of a release to the environment from the Evaporation Ponds via a surface overflow or the discovery of fluids along the face of either dike, OCD will be notified and this Action Plan will be implemented via the appropriate response action(s).

In the event of an evaporation pond surface overflow... guidelines from Annex 10 (Spill Prevention Control and Countermeasures Plan) of the Integrated Contingency Plan for the Refinery will be followed. A copy of this Plan is maintained on-site and includes actions to be performed to minimize and contain surface impacts.

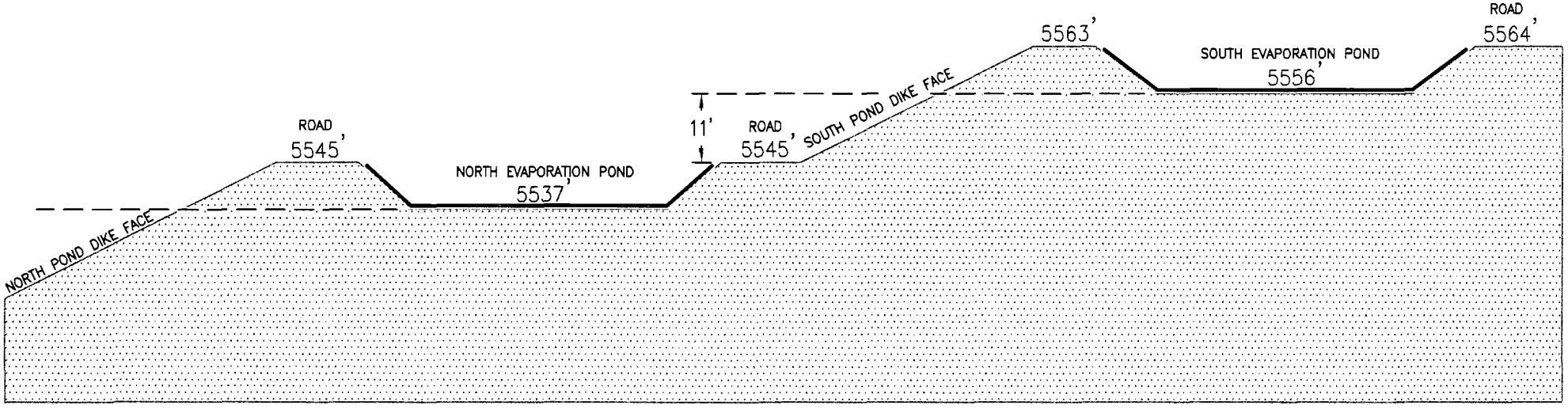
Water will be diverted from the affected pond and the fluid level in the over-filled pond will be lowered using a pump and/or vacuum truck. The pond will not be placed back into service until the fluid level is lowered below the minimum 3-foot freeboard level.

In the event fluid appears on the face of the dike and is confirmed to be used process water ....the affected evaporation pond will be bypassed and the water process stream will be diverted. All fluids from the leaking evaporation pond will be pumped out so the liner can be inspected and repaired. The pond will not be returned to service until repairs are completed.



Western Refining
WESTERN REFINING SOUTHWEST

Date: 9-29-10	Site Plan Evaporation Pond Location
Scale: As Shown	
Drawn: TAG	

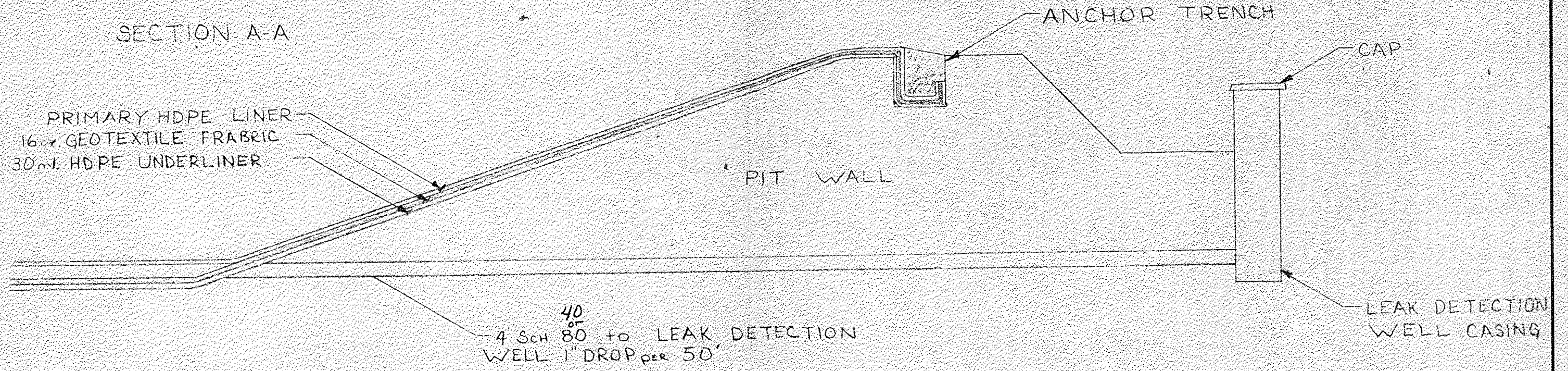


NOTE:
ELEVATIONS GIVEN ARE IN FEET ABOVE SEA LEVEL ROUNDED TO THE NEAREST FOOT.

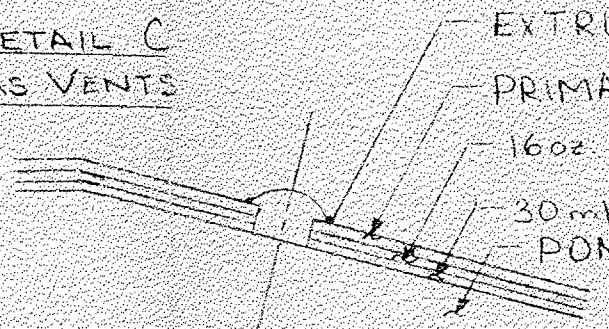
Western Refining
WESTERN REFINING SOUTHWEST

Date: 9-29-10	Evaporation Pond Elevation Diagram
Scale: NTS	
Drawn: TAG	

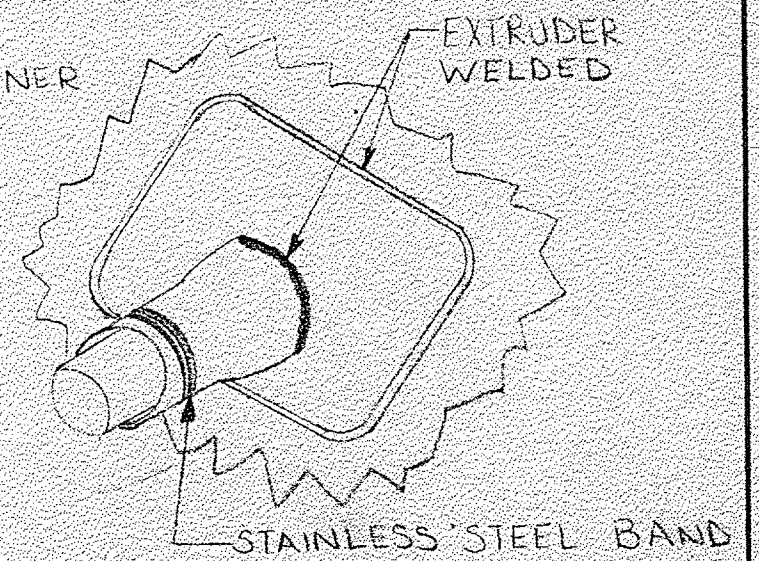
SECTION A-A

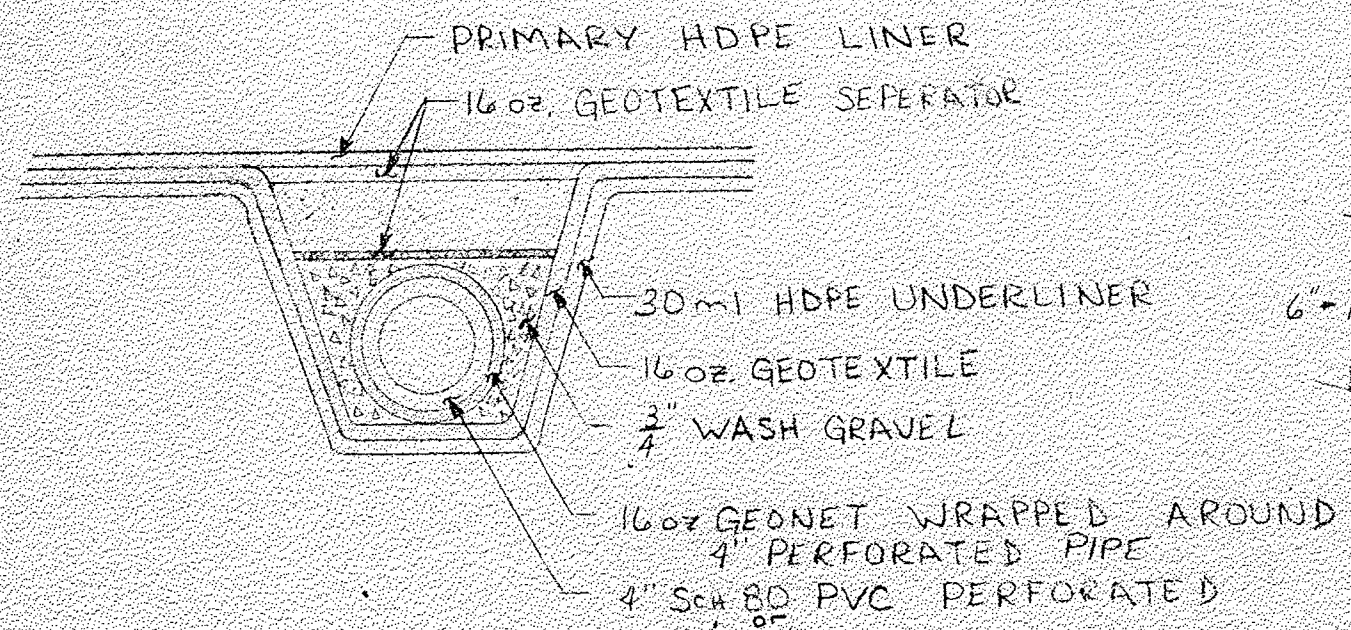


DETAIL C
GAS VENTS



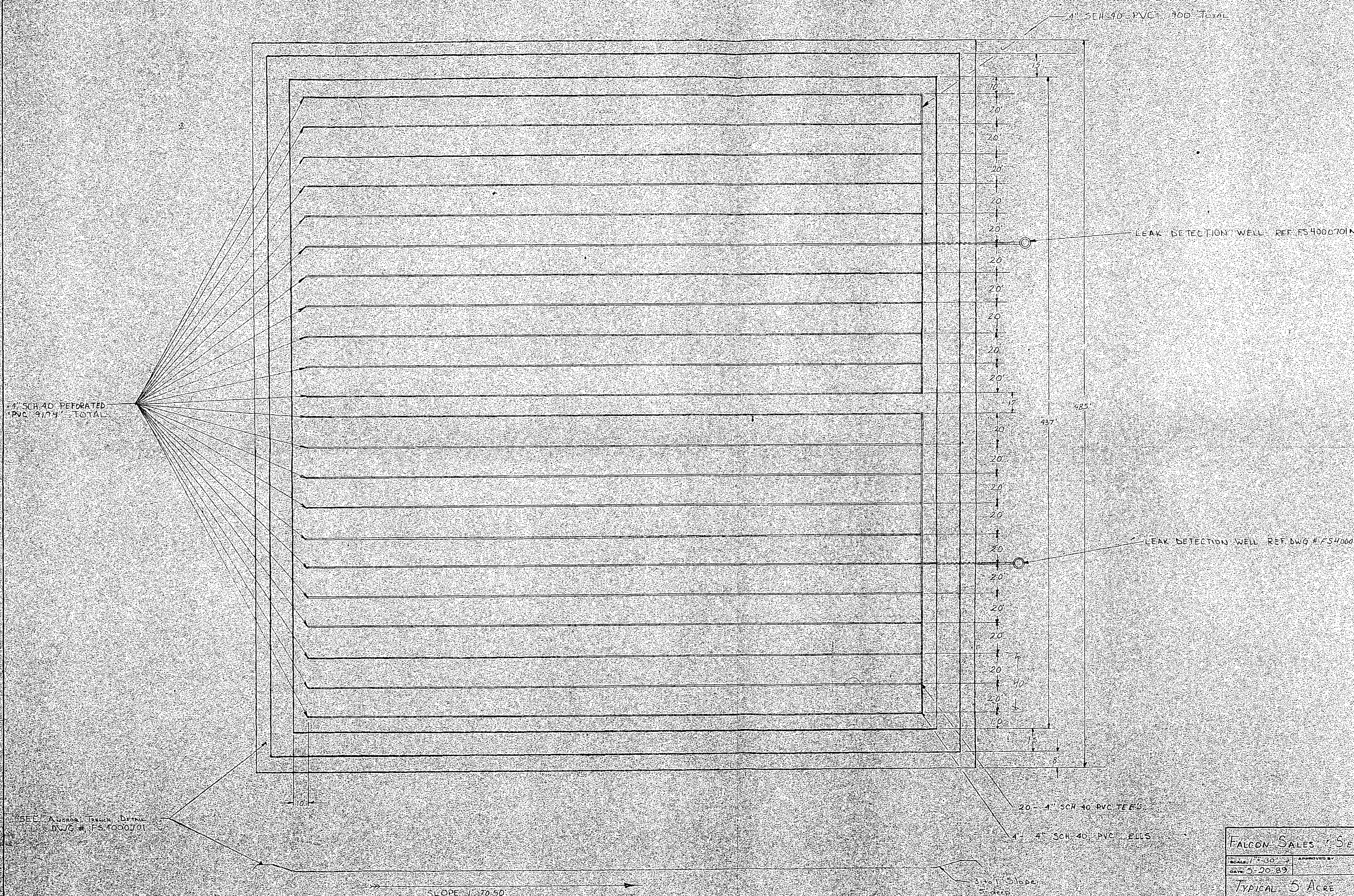
DETAIL D: TYPICAL BOOT





SECTION B-B
END VIEW OF LEAK DETECTION SYSTEM

FALCON SALES & SERVICE CO., INC.		
SCALE: NONE	APPROVED BY	DRAWN BY KP
DATE: JAN 19, 1983		
TYPICAL DOUBLELINED HIGH DENSITY		
POLYETHYLENE LINER		DRAWING NUMBER FS4000701M



FALCON SALES & SERVICE CO., INC		
SCALE: 1" = 30'	APPROVED BY	DRAWN BY: JKP
DATE: 5-20-89		
TYPICAL 5 ACRE POND WITH		
N.M. REG. LEAK DETECTION		DRAWING NUMBER FS-200040-L

Chavez, Carl J, EMNRD

From: Schmaltz, Randy [Randy.Schmaltz@wnr.com]
Sent: Tuesday, May 18, 2010 7:49 AM
To: Chavez, Carl J, EMNRD
Subject: RE: Tank #13 Floor replacement
Attachments: Tank #13 Floor replacement.pdf

Carl,

Please find enclosed the statement by the Certified Engineer that you requested. Tom Robinson is a Professional Engineer working for Tanco Engineering.

Thanks
Randy

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, May 11, 2010 10:57 AM
To: Schmaltz, Randy
Cc: VonGonten, Glenn, EMNRD
Subject: RE: Tank #13 Floor replacement

Randy:

Good morning. As we discussed, the discharge permit renewal is near completion and there are new secondary containment requirements for tanks with an option for an alternative method to be considered within a certain time frame. The permit will require secondary containment retrofits, liners, etc. to contain tank leaks if they occur.

I appreciate the communication on the new Tanco Engineering Inc. (Tanco) tank bottom replacement design for the gasoline tank (Tank #13) where Western Refining attempted to complete repairs (patches, welding seams, etc.) on the tank bottom from metal loss, etc. discovered during a scheduled API inspection of the tank. After attempting to place the tank back into service (an MIT was likely performed), a leak was noticed and Western obtained an engineering design from Tanco. While the design lays out the basic engineering design, the structural and engineering details on the construction of the concrete design with grooves was not specified in your submittal.

The OCD requests a write-up on how the cement will be constructed (will grooved concrete sloping downward from the circumference of tank appear as a tube or wedge hold along perimeter of the tank concrete?) and engineering construction of the 4 inch concrete above the failed tank bottom. The OCD is concerned about preferential cracking along the grooves from the bearing load in a layer of concrete 4 inches thick wth grooves in the cement. .

The OCD also requires a statement by a Certified Engineer that the construction design (i.e., 4 inches of cement) with the designed grooves set at 45 degree angles above the failed tank bottom will not fracture under full load of the filled gasoline tank.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Schmaltz, Randy [mailto:Randy.Schmaltz@wnr.com]
Sent: Thursday, May 06, 2010 4:42 PM
To: Chavez, Carl J, EMNRD
Subject: Tank #13 Floor replacement

Carl,

Western Refining Southwest, Inc. Bloomfield Refinery is seeking OCD's approval to install a new floor in Storage Tank #13. Tank #13 is a 30,000 bbl tank in unleaded gasoline service. Western proposes to install an 80 mil HDPE liner with welded seams on top of the existing metal floor. A four inch concrete slab with leak detection slots will then be poured on top of the HDPE liner. Once cured a new metal floor will be installed on top of the concrete. I have included a drawings that have been provided be the Tank contractor.

Your prompt consideration is greatly appreciated.

Randy Schmaltz
Environmental Manager

Western Refining Southwest, Inc.
Bloomfield Refinery
#50 County Road 4990
Bloomfield, New Mexico 87413
(505) 632-4171
(505) 320-6989
email: randy.schmaltz@wnr.com

TANCO

ENGINEERING, INC.

1400 TAURUS COURT, LOVELAND, CO. 80537 TEL (970) 776-4200 FAX (970) 776-4300

May 17, 2010

Randy Schmaltz
Western Refining
P.O. Box 159
Bloomfield, NM 87413
(505)632-4164

Re: 67' bottom replacement

Mr. Schmaltz:

Tanco is currently install at concrete double bottom in your 67' diameter tank is Bloomfield, NM. This "El Segundo" bottom consists of a HDPE liner over the existing ¼" floor plate, 2" minimum of 3000 psi fibermesh concrete and a ¼" floor plate. This particular double bottom configuration was originally installed in California in the early 1980s and for thousands of tanks since. It is detailed in API 650 Appendix I figure I-4.

The benefits of this configuration is that the concrete does not require any cathodic protection since all water is drained out of the tank floor due to the slope. The thickness of the concrete is irrelevant since it is not stressed except for the product weight. This product weight is only 20 psi. The concrete is in compression and rated for 3000 psi.

Prices do not include taxes. Please call me if you have any questions.

Sincerely,

Tom Robinson, PE

5/17/10

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, May 11, 2010 10:57 AM
To: 'Schmaltz, Randy'
Cc: VonGonten, Glenn, EMNRD
Subject: RE: Tank #13 Floor replacement

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I appreciate the communication on the new Tanco Engineering Inc. (Tanco) tank bottom replacement design for the gasoline tank (Tank #13) where Western Refining attempted to complete repairs (patches, welding seams, etc.) on the tank bottom from metal loss, etc. discovered during a scheduled API inspection of the tank. After attempting to place the tank back into service (an MIT was likely performed), a leak was noticed and Western obtained an engineering design from Tanco. While the design lays out the basic engineering design, the structural and engineering details on the construction of the concrete design with grooves was not specified in your submittal.

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The OCD also requires a statement by a Certified Engineer that the construction design (i.e., 4 inches of cement) with the designed grooves set at 45 degree angles above the failed tank bottom will not fracture under full load of the filled gasoline tank.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

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Sent: Thursday, May 06, 2010 4:42 PM
To: Chavez, Carl J, EMNRD
Subject: Tank #13 Floor replacement

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Your prompt consideration is greatly appreciated.

Randy Schmaltz
Environmental Manager

Western Refining Southwest, Inc.
Bloomfield Refinery
#50 County Road 4990
Bloomfield, New Mexico 87413
(505) 632-4171
(505) 320-6989
email: randy.schmaltz@wnr.com

Chavez, Carl J, EMNRD

From: Schmaltz, Randy [Randy.Schmaltz@wnr.com]
Sent: Thursday, May 06, 2010 4:42 PM
To: Chavez, Carl J, EMNRD
Subject: Tank #13 Floor replacement
Attachments: Tank #13 floor.TIF

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Your prompt consideration is greatly appreciated.

Randy Schmaltz
Environmental Manager

Western Refining Southwest, Inc.
Bloomfield Refinery
#50 County Road 4990
Bloomfield, New Mexico 87413
(505) 632-4171
(505) 320-6989
email: randy.schmaltz@wnr.com

TANCO
ENGINEERING, INC.
1400 TAURUS COURT, LOVELAND, CO. 80537 TEL (970) 776-4200 FAX (970) 776-4300

February 11, 2010

Cecil Cunningham
Western Refining
P.O. Box 159
Bloomfield, NM 87413
(505)632-4164

Re: 67' bottom replacement

Mr. Cunningham:

Thank you for the opportunity to bid on this project. Tanco's prices to remove the existing bottom and install a new ¼" steel bottom on this 67' diameter tank are listed below.

Material
Labor and Equipment 

Tanco's price to slot the tank 4" above the old floor, install an HDPE liner, 4" of concrete and a new ¼" steel bottom is listed below.

Material
Labor and Equipment 

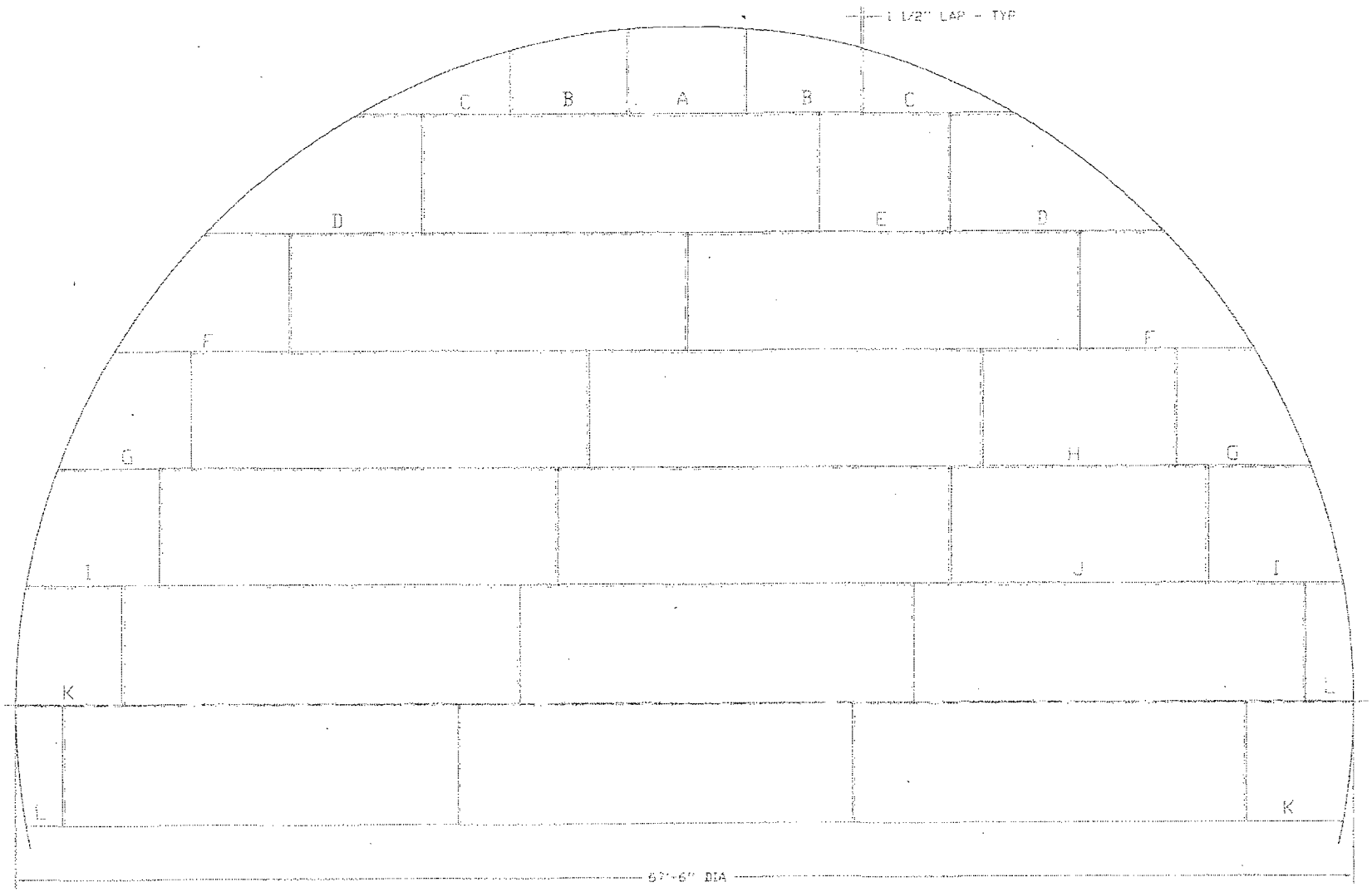
I have not included any nozzle modifications. This can be done as an extra after we determine existing nozzle orientations. If we install 6" of sand instead of concrete, deduct [redacted] from the price, but you will probably need some kind of cathodic protection.

Installation will take approximately 4 weeks with a 5 man crew.

Prices do not include taxes. Please call me if you have any questions.

Sincerely,

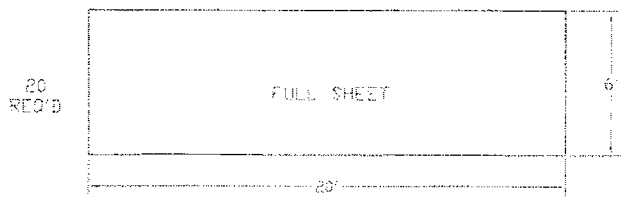
Tom Robinson, PE

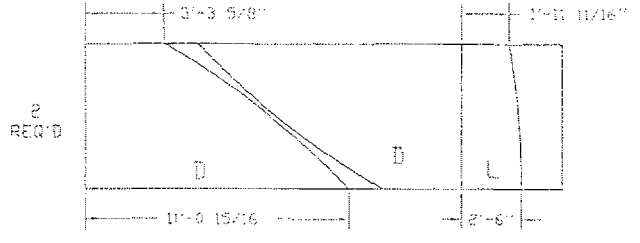


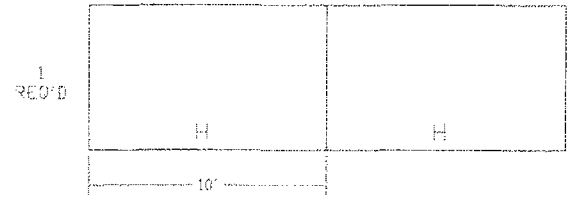
TANCO

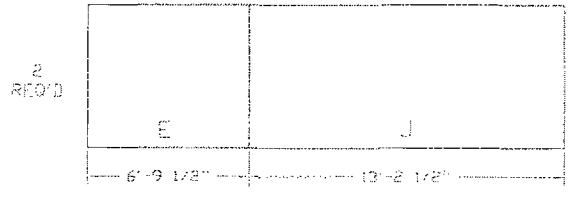
COMPANY: WESTERN REFINING	TITLE: 67'-6"Ø BOTTOM PLATE LAYOUT -- 1/4"							
LOCATION: BLOOMFIELD, NM	TANK #	BY: PMC	SCALE: 1/64	DATE: 4/28/10	DWG NO: 956-1	REV	SHT: 1	OF

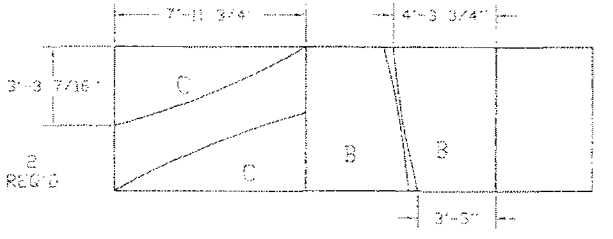
Tanco Engineering, Inc. (970) 776-1200

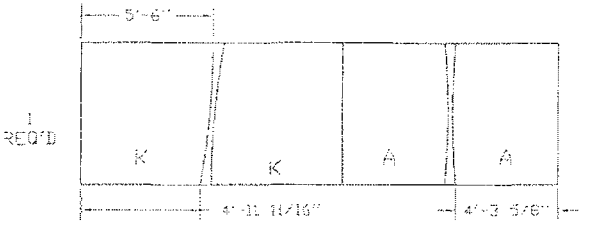


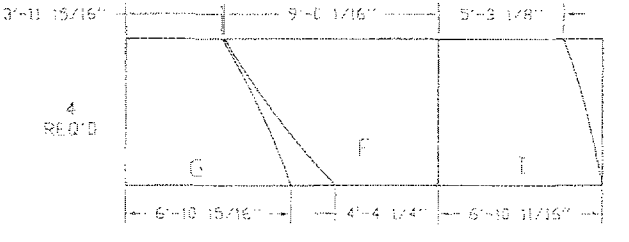






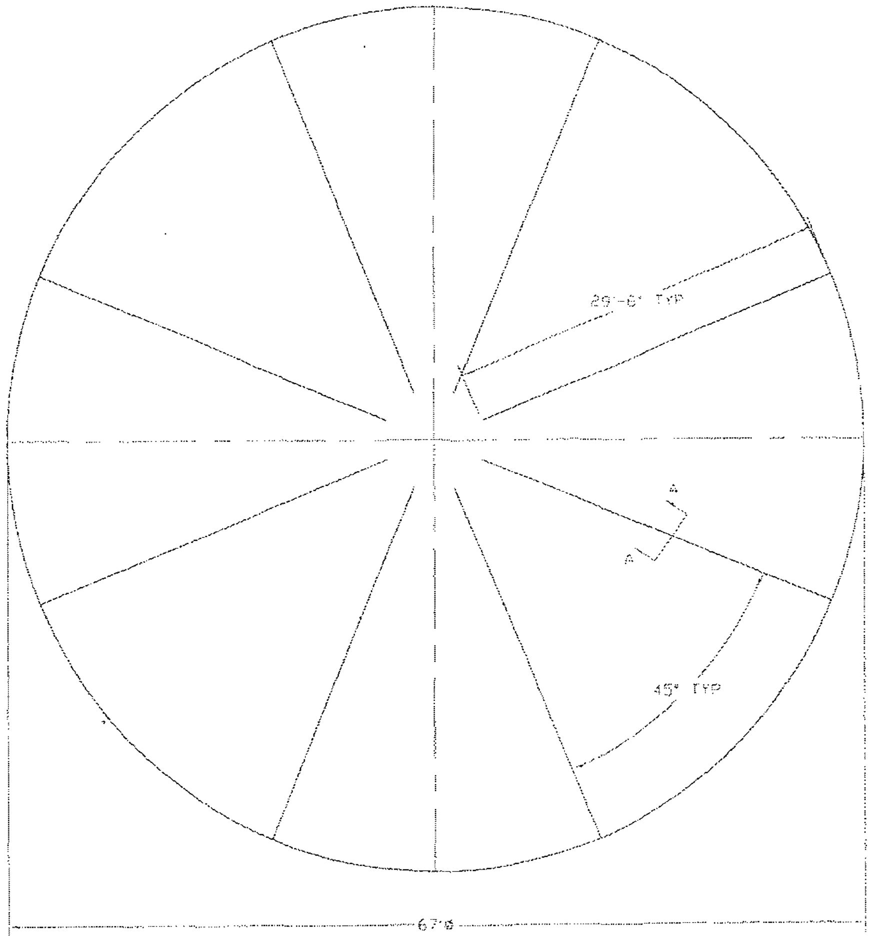


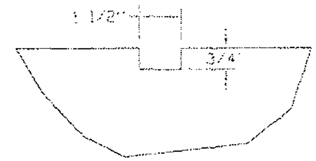




TANCO

COMPANY: WESTERN REFINING	TITLE: 67'-6"Ø BOTTOM PLATE SKETCHES - 1/4"							
LOCATION: BLOOMFIELD, NM	TANK #	BY: PNC	SCALE: 1/64	DATE: 4/26/10	DWG. NO: 956-1A	REV	SHT: 1A	OF



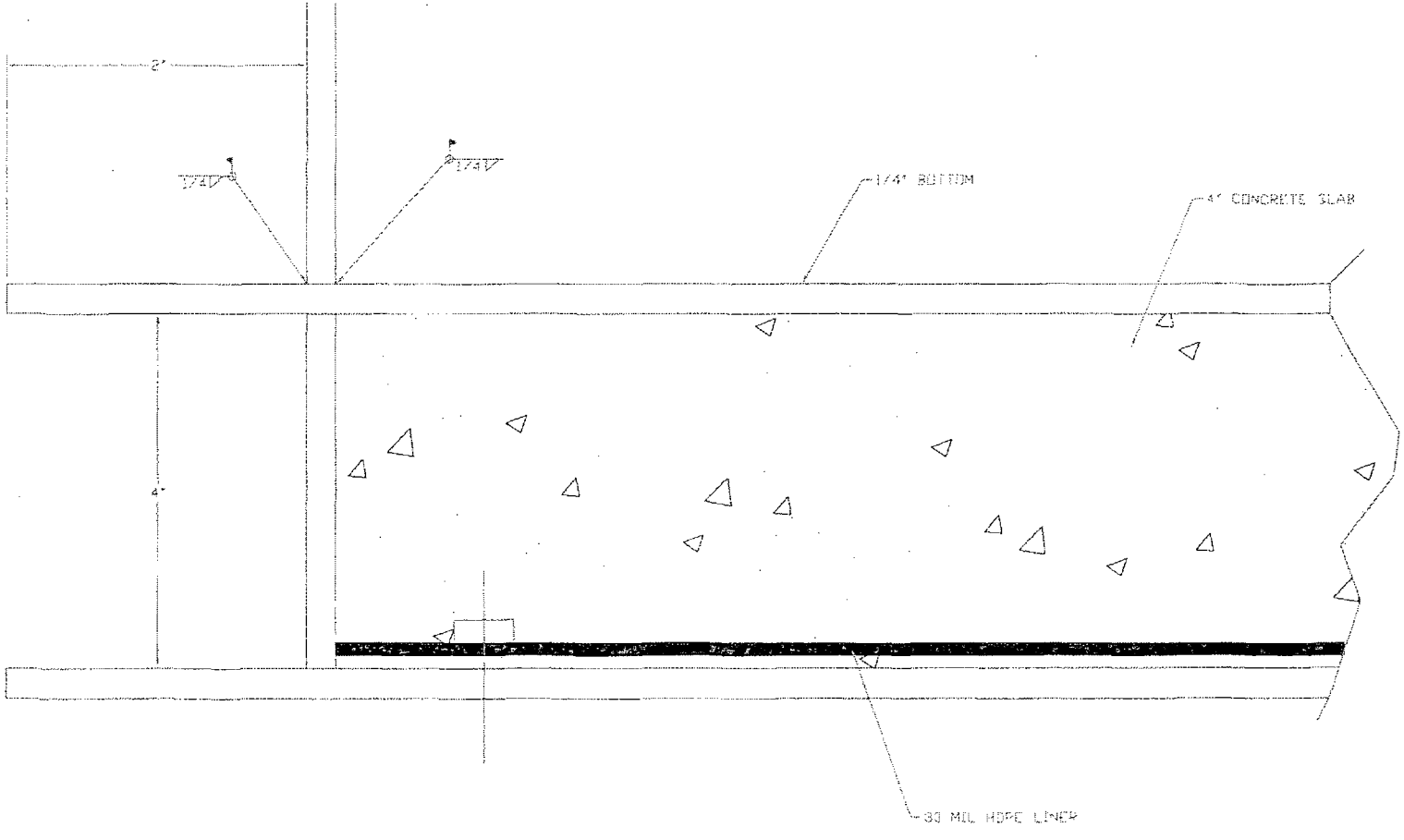


VIEW A-A
TYP GROOVE
NTS

TANCO

COMPANY WESTERN REFINING	TITLE CONGRETE GROOVE LAYOUT						
LOCATION BLOOMFIELD, NM	TANK #	BY PMc	SCALE 1/120	DATE 4/27/10	DWG NO 956-2A	REV	SHT 2A	OF

Tanco Engineering, Inc. (970) 776-4800



TANCO

COMPANY: WESTERN REFINING	TITLE: CONCRETE AND LINER							
LOCATION: BLOOMFIELD, NM	TANK 3	BY: PMC	SCALE: NTS	DATE: 1/27/10	DWG NO: 986-2	REV	SHT: 2	OF

Tanco Engineering Inc. (970) 726-4236