NM1 - ___5_____

MAJOR MODIFICATION

2007 - Present

Jones, Brad A., EMNRD

From: John Volkerding [bdinc@digii.net]
Sent: Monday, September 24, 2007 2:38 PM
To: Fesmire, Mark, EMNRD; Price, Wayne, EMNRD; Jones, Brad A., EMNRD
Subject: Draft Permit Application Sep 2007

Attachments: Draft Permit Application Sep 2007.pdf

Draft Permit Application Sep 2...

Gentlemen;

This has been far too long in coming, but with the pit rule, etc... any earlier would probably not have been helpful anyway. Not all the maps and drawings were scanned (they were too big).

If Wayne and Brad have time for a pre-submittal technical meeting to go over this to see what questions they may have so we can include them in the final submittal, that may help make the process easier for everyone.

I'll be in SF next week for the produced water task force, but that may be too soon for you all. I am flexible and can meet anytime that works for you.

Thanks a bunch, John

CHENEY·WALTERS·ECHOLS INC
ENGINEERS ▲ SURVEYORS
909 W. APACHE ▲ FARMINGTON, NM 87401
(505) 327-3303 ▲ FAX (505) 327-1471 ▲ www.c-w-e.com

NEW MEXICO

COLORADO

ARIZONA

IDAHO

SEP 24 2007

September 21, 2007

Mr. John Volkerding
General Manager
Basin Disposal, Inc.
P.O. Box 100
Aztec, NM 87410

Re: Expansion Project
Application for Wastewater Management Facility

Dear John:

We are submitting herewith one (1) preliminary copy of the enclosed application for your review and to submit to the State for their review. I will be out of town next week. If you have any questions please contact the office and they can contact me.

Very truly yours,

CHENEY ▲ WALTERS ▲ ECHOLS, INC.

Robert A. Echols, Jr., P.E.
Vice President

RAE:lw 07111

Enclosures

BASIN DISPOSAL FACILITY

EXPANSION PROJECT

SEPTEMBER 2007

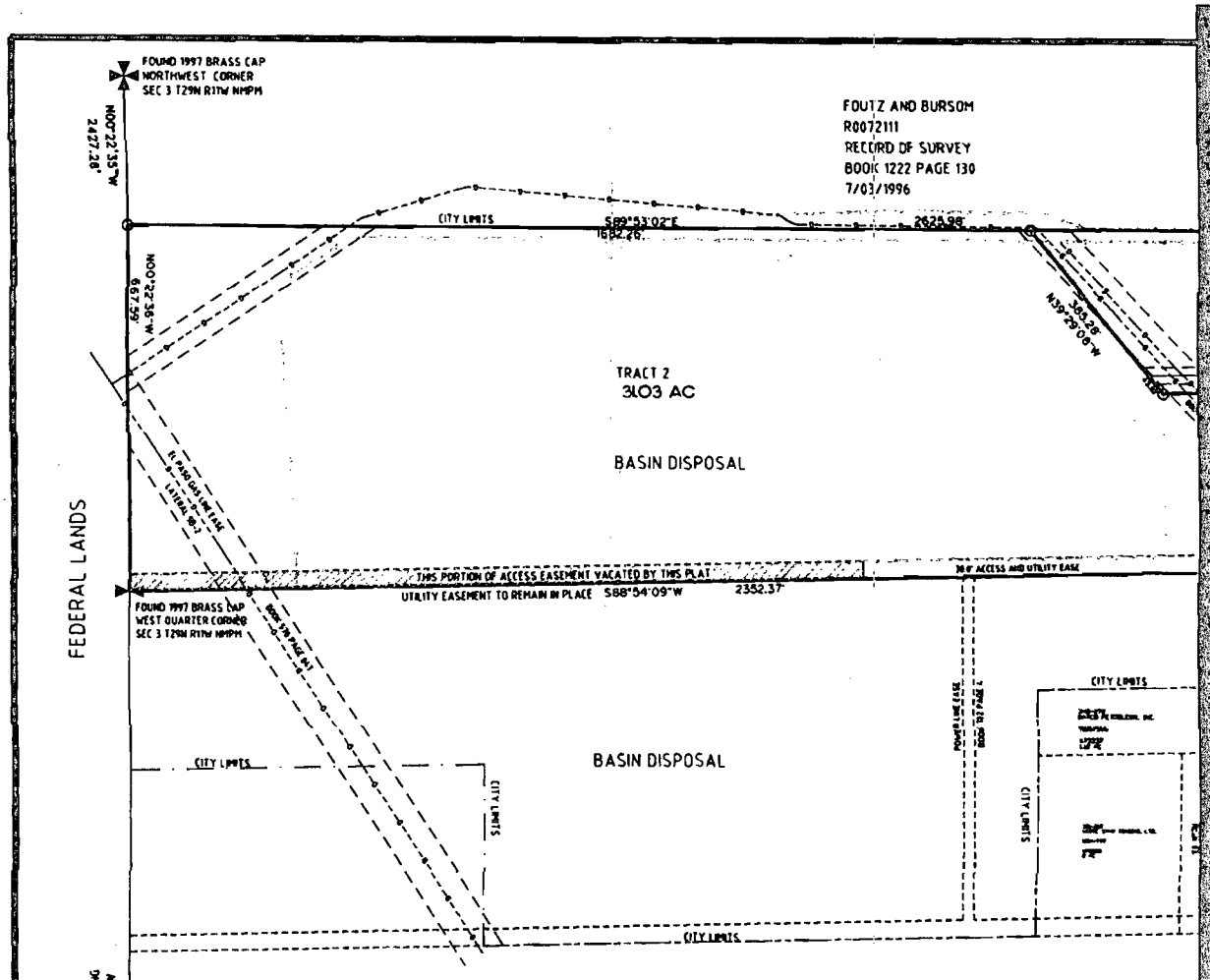
PREPARED BY:

CHENEY·WALTERS·ECHOLS INC.
ENGINEERS ▲ SURVEYORS
909 W. APACHE ▲ FARMINGTON, NEW MEXICO 87401 ▲ (505) 327-3303

19.15.36.8.C (1)

Names and addresses of the applicant and principal officers and owners of 25 percent or more

Principal Officers:
President: Jerry Sandel, PO Box 100, Aztec, NM 87410
Vice President: David Turner, PO Box 358, Farmington, NM, 87499
Sec- Tres: David Turner, PO Box 358, Farmington, NM, 87499



DESCRIPTIONS

TRACT 1 - EXEMPTION TRACT

A tract of land situated in the Northwest Quarter (NW1/4) of Section 3, T29N, R11W, N.M.P.M., San Juan County, New Mexico, being more particularly described as follows:

BEGINNING at a point on the south line of the record of survey filed for record in Book 1222, page 130, from whence the West Quarter Corner, a found 1997 brass cap, bears N89°53'02"W for a distance of 1682.26 feet and S00°22'36"E for a distance of 667.59 feet;

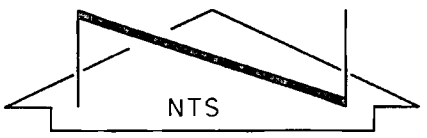
THENCE: S89°53'02"E for a distance of 943.72 feet to a point on the westerly right-of-way of State Highway 544;
THENCE: S00°33'59"W for a distance of 282.21 feet along said right-of-way;
THENCE: S88°54'34"W for a distance of 696.05 feet;
THENCE: N39°29'08"W for a distance of 385.28 feet to the point of beginning, containing 5.47 acres, more or less.

TRACT 2 - REMAINDER TRACT

A tract of land situated in the Northwest Quarter (NW1/4) of Section 3, T29N, R11W, N.M.P.M., San Juan County, New Mexico, being more particularly described as follows:

BEGINNING at the West Quarter Corner of said Section 3;

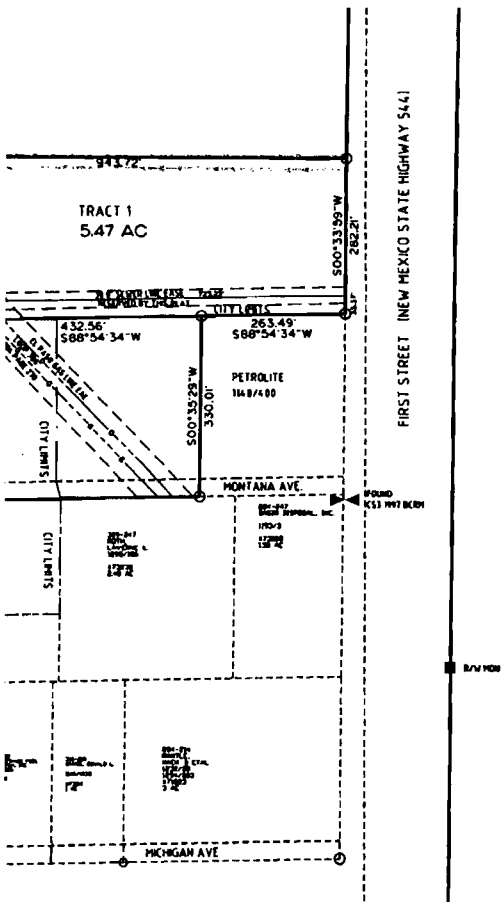
THENCE: N00°22'36"W for a distance of 667.59 feet along the west line of Section 3 to the Southwest Corner of the record of survey filed for record in Book 1222, page 130;
THENCE: S89°53'02"E for a distance of 1682.26 feet along the south line of said record of survey;
THENCE: S39°29'08"E for a distance of 385.28 feet;
THENCE: N88°54'34"E for a distance of 432.56 feet;
THENCE: S00°35'29"W for a distance of 330.01 feet along the west line of a tract of land described in Book 448, page 400 to a point on the southerly right-of-way of Montana Avenue;
THENCE: S88°54'09"W for a distance of 2352.37 feet to the point of beginning, containing 3L03 acres, more or less.



= SECTION CORNER AS NOTED
= QUARTER CORNER AS NOTED
○ = SET 1/2" REBAR W/CAP LS 6159
⊙ = SET 1/2" REBAR W/ALUM CAP LS 6159
⊖ = FOUND REBAR AS NOTED
× = X MARK IN CONCRETE
◇ = SET PK NAIL W/WASHER
■ = HWY DEPT BRASS CAP R/W MON

CHENEY-WALTERS-ECHOLS INC.
ENGINEERS · SURVEYORS
909 W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303

ISSUE DATE: 04/03/2007 - GTW
PRINTED: September 07, 2007
FILE: \\Gtw\d\2007GTW\07423SUBD.dwg



EXEMPTION SURVEY
FOR
BASIN DISPOSAL, INC., A NEW MEXICO CORPORATION
NW/4 SECTION 3, T29N, R11W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

OWNERS CERTIFICATE OF INTENT

WE, BASIN DISPOSAL, INC., A NEW MEXICO CORPORATION, CLAIM AN EXEMPTION FROM THE REQUIREMENTS OF THE NEW MEXICO SUBDIVISION ACT AND THE SAN JUAN COUNTY SUBDIVISION REGULATIONS FOR THE FOLLOWING REASON(S). WE CERTIFY THAT THIS TRANSACTION INVOLVES:

THE SALE, LEASE OR OTHER CONVEYANCE OF A SINGLE PARCEL FROM A TRACT OF LAND, EXCEPT FROM A TRACT WITHIN A PREVIOUSLY APPROVED SUBDIVISION, WITHIN ANY FIVE (5) YEAR PERIOD; PROVIDED THAT A SECOND OR SUBSEQUENT SALE, LEASE OR OTHER CONVEYANCE FROM THE SAME TRACT OF LAND WITHIN FIVE (5) YEARS OF THE FIRST SALE, LEASE OR OTHER CONVEYANCE SHALL BE SUBJECT TO THE PROVISIONS OF THE NEW MEXICO SUBDIVISION ACT AND THESE REGULATIONS; PROVIDED FURTHER THAT A SURVEY SHALL BE FILED WITH THE COUNTY CLERK INDICATING THE FIVE (5) YEAR HOLDING PERIOD FOR BOTH THE ORIGINAL TRACT AND THE NEWLY CREATED TRACT.

WE FURTHER CERTIFY THAT THE INFORMATION PROVIDED IN THIS CLAIM OF EXEMPTION PLAT IS TRUE AND ACCURATE AND THAT ALL DOCUMENTS PRESENTED IN SUPPORT OF MY APPLICATION FOR AN EXEMPTION ARE ORIGINALS OR ARE TRUE, COMPLETE AND CORRECT COPIES OF THE ORIGINALS.

_____
Jerry Sondel, President
Basin Disposal, Inc.

State of New Mexico)
) ss:
County of San Juan)

The foregoing was acknowledged before me by Jerry Sondel, President of Basin Disposal, Inc., the _____ day of _____, _____.

My Commission Expires:

_____ _____
Notary Public

ACCEPTANCE - SAN JUAN COUNTY

The Claim of Exemption shown hereon was duly submitted to the San Juan County Subdivision Review Officer (Real Estate Specialist) and is hereby approved and accepted for recording, this _____ day of _____, _____.

Signed: _____
Subdivision Review Officer/
Real Estate Specialist

ACCEPTANCE BY THE CITY OF BLOOMFIELD

This re-plat/lot-split/land-split, shown hereon was duly submitted to the City of Bloomfield, New Mexico, Planning/Zoning Administrator and is hereby approved and accepted for recording this _____ day of _____, _____.

_____ Seal:
Planning and Zoning Administrator
City of Bloomfield, New Mexico

REFERENCE LIST

R1. Date of field work was March 9, 2007.
R2. Basis of bearing is Bloomfield GPS control network.
R3. San Juan County Assessor's map of Section 3, T29N, R11W.
R4. Record of survey in Book 1222, page 130 on July 3, 1996.
R5. Warranty Deed in Book 139, page 363.
R6. Warranty Deed in Book 193, page 782.
R7. Warranty Deed in Book 548, page 400.
R8. Dependent re-survey of Section 3, T29N, R11W by United States Department of the Interior, Bureau of Land Management dated June 8, 2000.

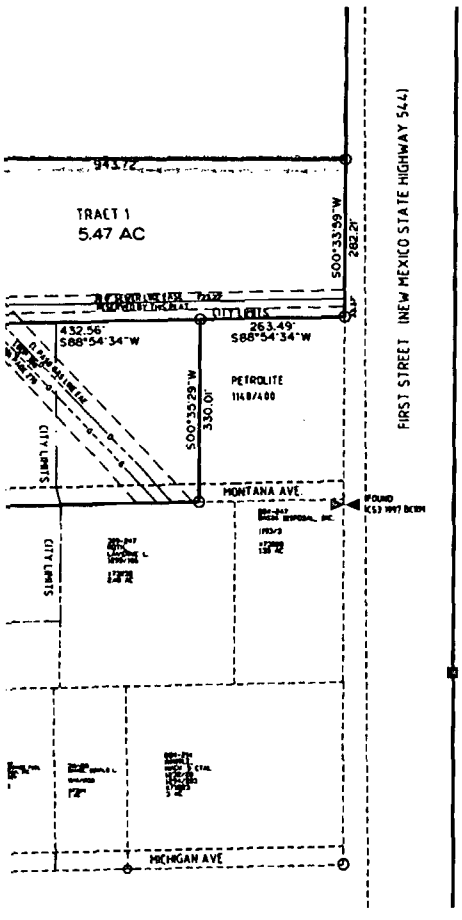
CERTIFICATION

I, George T. Walters, a New Mexico Professional Surveyor certify that I conducted and am responsible for this Survey Plat, that this Survey is true and correct to the best of my knowledge and belief, and that this Survey Plat meets the Minimum Standards for Surveying in New Mexico.

I further certify that this is not a subdivision as defined in the New Mexico Subdivision Act and that this is an exempt division of land.

_____
Date

_____
George T. Walters
Professional Land Surveyor No. 6159
State of New Mexico



EXEMPTION SURVEY
FOR
BASIN DISPOSAL, INC., A NEW MEXICO CORPORATION
NW¼ SECTION 3, T29N, R11W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

OWNERS CERTIFICATE OF INTENT

WE, BASIN DISPOSAL, INC., A NEW MEXICO CORPORATION, CLAIM AN EXEMPTION FROM THE REQUIREMENTS OF THE NEW MEXICO SUBDIVISION ACT AND THE SAN JUAN COUNTY SUBDIVISION REGULATIONS FOR THE FOLLOWING REASON(S). WE CERTIFY THAT THIS TRANSACTION INVOLVES:

THE SALE, LEASE OR OTHER CONVEYANCE OF A SINGLE PARCEL FROM A TRACT OF LAND, EXCEPT FROM A TRACT WITHIN A PREVIOUSLY APPROVED SUBDIVISION, WITHIN ANY FIVE (5) YEAR PERIOD; PROVIDED THAT A SECOND OR SUBSEQUENT SALE, LEASE OR OTHER CONVEYANCE FROM THE SAME TRACT OF LAND WITHIN FIVE (5) YEARS OF THE FIRST SALE, LEASE OR OTHER CONVEYANCE SHALL BE SUBJECT TO THE PROVISIONS OF THE NEW MEXICO SUBDIVISION ACT AND THESE REGULATIONS; PROVIDED FURTHER THAT A SURVEY SHALL BE FILED WITH THE COUNTY CLERK INDICATING THE FIVE (5) YEAR HOLDING PERIOD FOR BOTH THE ORIGINAL TRACT AND THE NEWLY CREATED TRACT.

WE FURTHER CERTIFY THAT THE INFORMATION PROVIDED IN THIS CLAIM OF EXEMPTION PLAT IS TRUE AND ACCURATE AND THAT ALL DOCUMENTS PRESENTED IN SUPPORT OF MY APPLICATION FOR AN EXEMPTION ARE ORIGINALS OR ARE TRUE, COMPLETE AND CORRECT COPIES OF THE ORIGINALS.

_____
Jerry Sondel, President
Basin Disposal, Inc.

State of New Mexico)
) ss:
County of San Juan)

The foregoing was acknowledged before me by Jerry Sondel, President of Basin Disposal, Inc., the _____ day of _____, ____.

My Commission Expires:

_____ _____
Notary Public

ACCEPTANCE - SAN JUAN COUNTY

The Claim of Exemption shown hereon was duly submitted to the San Juan County Subdivision Review Officer (Real Estate Specialist) and is hereby approved and accepted for recording, this _____ day of _____, ____.

Signed: _____
Subdivision Review Officer/
Real Estate Specialist

ACCEPTANCE BY THE CITY OF BLOOMFIELD

This re-plat/lot-split/land-split, shown hereon was duly submitted to the City of Bloomfield, New Mexico, Planning/Zoning Administrator and is hereby approved and accepted for recording this _____ day of _____, ____.

_____ Seal:
Planning and Zoning Administrator
City of Bloomfield, New Mexico

REFERENCE LIST

R1. Date of field work was March 9, 2007.
R2. Basis of bearing is Bloomfield GPS control network.
R3. San Juan County Assessor's map of Section 3, T29N, R11W.
R4. Record of survey in Book 1222, page 130 on July 3, 1996.
R5. Warranty Deed in Book 439, page 363.
R6. Warranty Deed in Book 493, page 782.
R7. Warranty Deed in Book 448, page 400.
R8. Dependent re-survey of Section 3, T29N, R11W by United States Department of the Interior, Bureau of Land Management dated June 15, 2000.

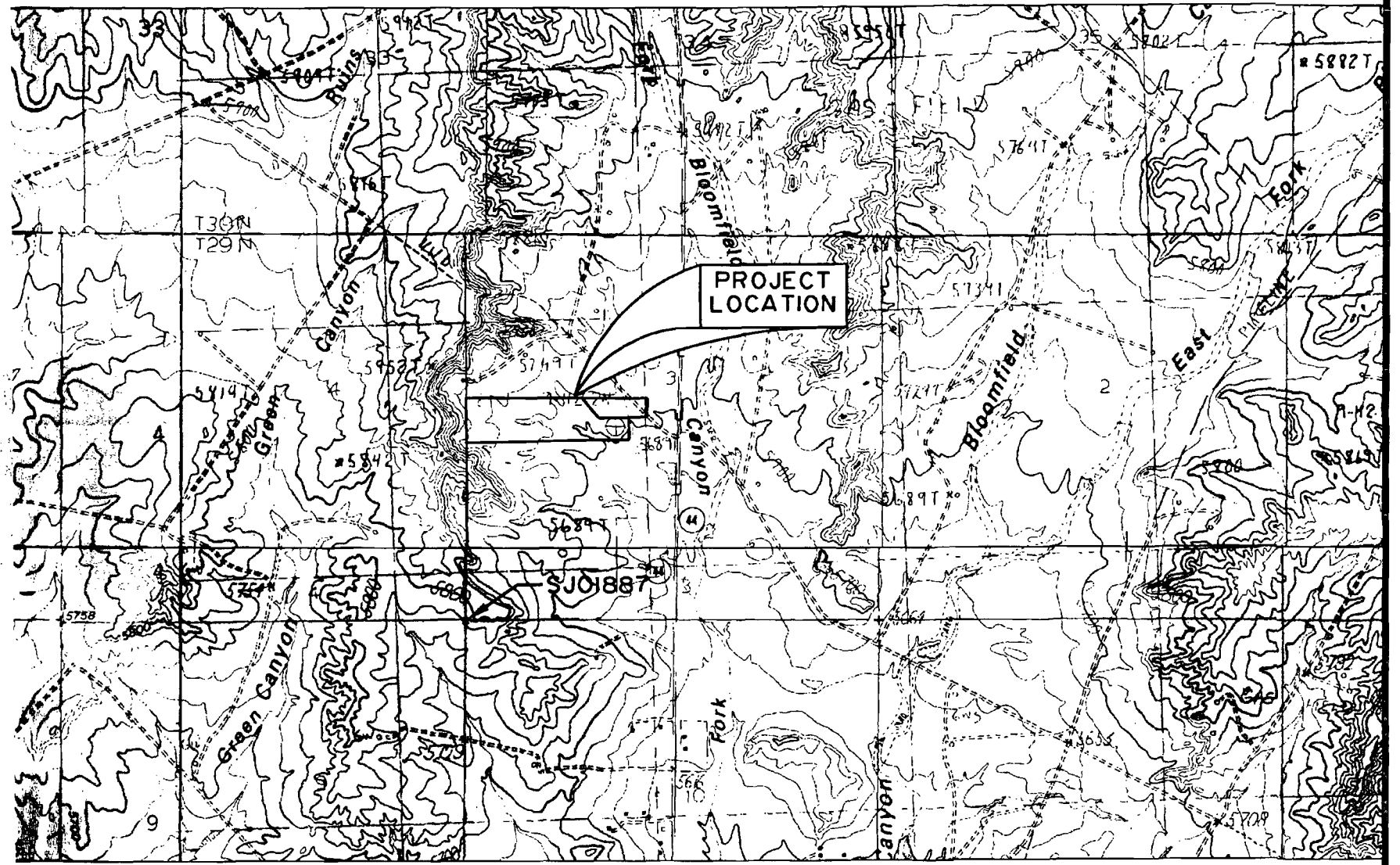
CERTIFICATION

I, George T. Walters, a New Mexico Professional Surveyor certify that I conducted and am responsible for this Survey Plat, that this Survey is true and correct to the best of my knowledge and belief, and that this Survey Plat meets the Minimum Standards for Surveying in New Mexico.

I further certify that this is not a subdivision as defined in the New Mexico Subdivision Act and that this is an exempt division of land.

_____ _____
Date George T. Walters
Professional Land Surveyor No. 8159
State of New Mexico

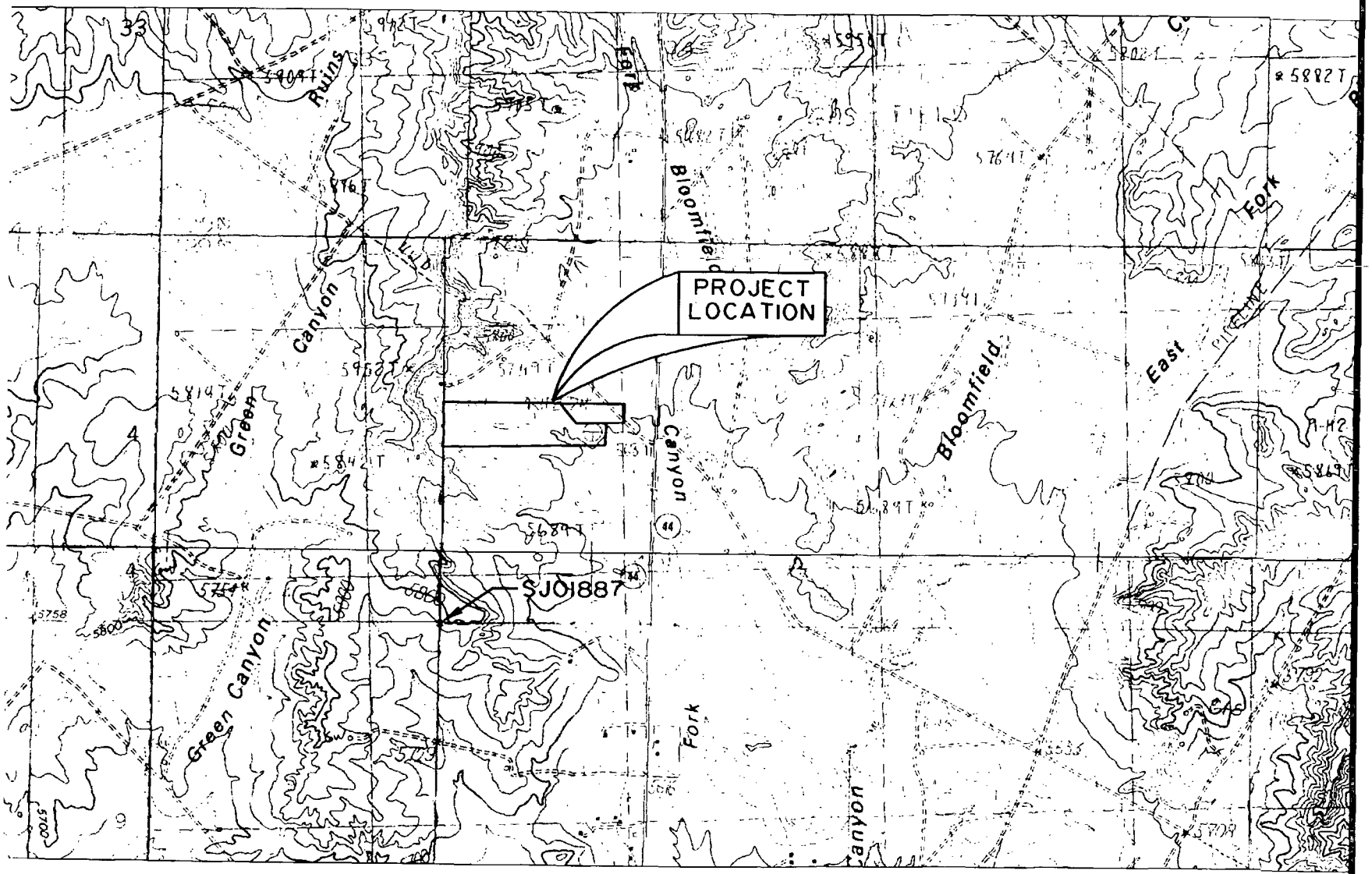
MAP OF EXISTING SURFACE WATERCOURSES AND WELLS



CHENEY·WALTERS·ECHOLS INC.
ENGINEERS · SURVEYORS
908 W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303

ISSUE DATE: 09/10/2007
PRINTED: September 11, 2007
SCALE: 1"=2000'
FILE: C:\D\KKN-DWG\2007\07111\07111QUAD.dwg

MAP OF EXISTING SURFACE WATERCOURSES AND WELLS



2000 1000 0 2000 4000 6000

SCALE: 1"=2000'

CHENEY·WALTERS·ECHOLS INC.
ENGINEERS · SURVEYORS
W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303

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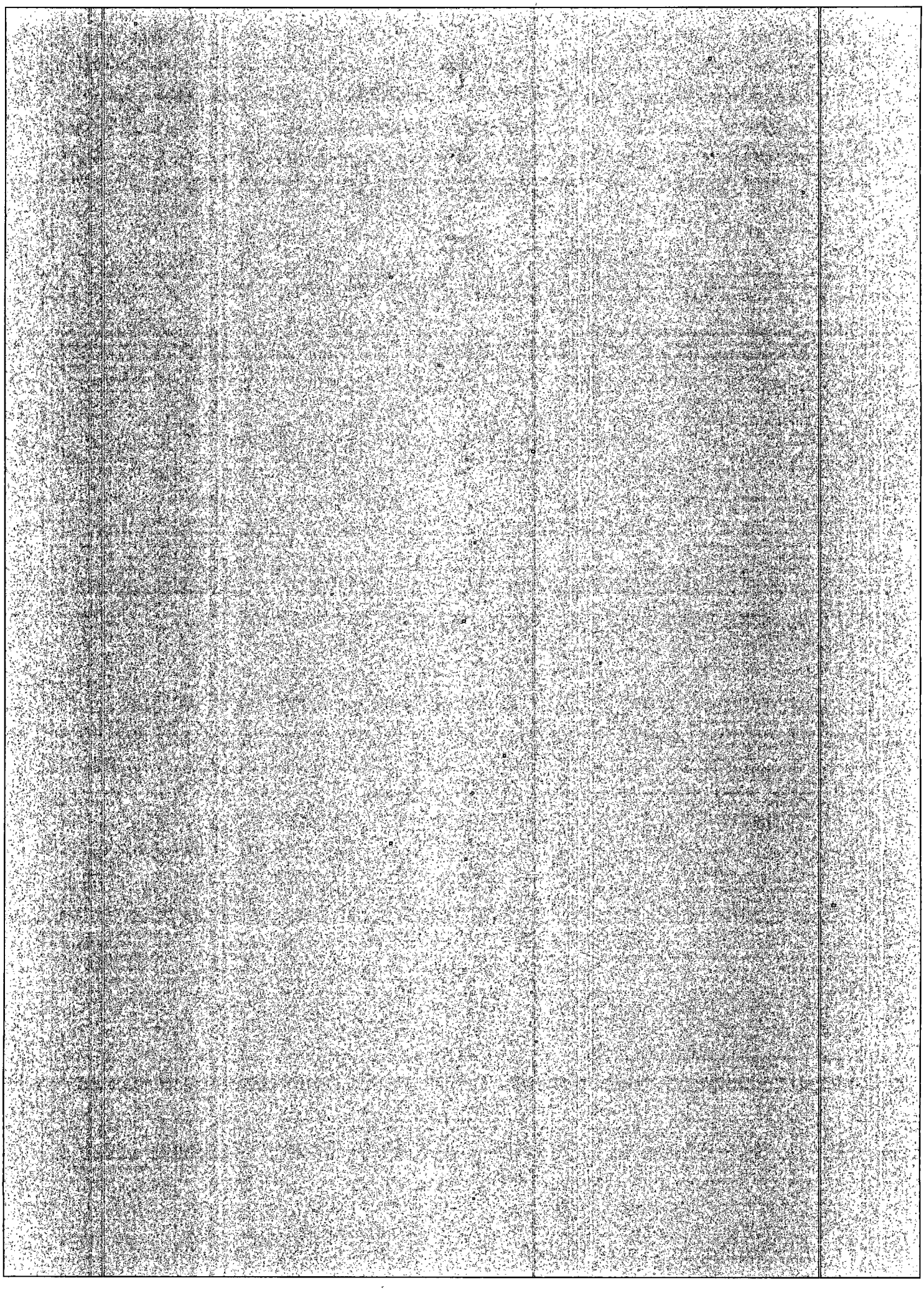


New Mexico Office of the State Engineer
Transaction Summary

Back

72121 All Applications Under Statute 72-12-1

Trn_nbr: 228438 **Trn_desc:** SJ 01887 **File Date:** 07/31/1984

Primary status: EXP Expired Permit
Secondary status: EXP Expired
Person assigned: *******
Applicant: PATRICIA HARGIS

Events

Date	Type	Description	Comment	Processed By
07/31/1984	APP	Application Received	*	******
08/02/1984	FIN	Final Action on application		******
08/02/1984	WAP	General Approval Letter		******
08/16/1985	EXP	Expired Permit (well log late)		******
01/03/2003	ARV	Rec. & Arch - file location	SJ 01887 Box: 97	******

Trn_File_Nbr	Acres	Diversion	Consumptive	Purpose of Use
SJ 01887	0	3	0	DOM 72-12-1 DOMESTIC ONE HOUSEHOLD

Point of Diversion
SJ 01887 29N 11W 03 SW in San Juan County

Conditions
1A :Depth of the well shall not exceed the thickness of the valley fill.

4 :Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

Action of the State Engineer
Approval Code: A Approved
Action Date: 08/02/1984
log due date: 08/15/1985
State Engineer:
By:

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 29N Range: 11W Sections: 3

NAD27 X: Y: Zone: Search Radius:

County: SJ Basin: SJ(San Juan) Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

POD / SURFACE DATA REPORT 09/07/2007

DB File Nbr	Use	(acre ft per annum) Diversion	Owner	POD Number	(qua (qua
SJ 01887	DOM	0	PATRICIA HARGIS	SJ 01887	
SJ 01995	DOM	3	RAYMOND DETTERRERA	SJ 01995	

Record Count: 2

New Mexico Office of the State Engineer
Transaction Summary

Back

72121 All Applications Under Statute 72-12-1

Trn_nbr: 226226 **Trn_desc:** SJ 01995 **File Date:** 08/23/1985

Primary status: PMT Permit
Secondary status: APR Approved
Person assigned: *******
Applicant: RAYMOND DEHERRERA

Actions

Date	Type	Description	Comment	Processed By
08/23/1985	APP	Application Received	*	******
08/26/1985	FIN	Final Action on application		******
08/26/1985	WAP	General Approval Letter		******
11/03/2003	ARV	Rec & Arch - file location	SJ 01995 Box: 99	******

Trn_File_Nbr	Acres	Diversion	Consumptive	Purpose of Use
SJ 01995	0	3	0	DOM 72-12-1 DOMESTIC ONE HOUSEHOLD

Point of Diversion
SJ 01995 29N 11W 03 NE SW in San Juan County

Conditions
4 :Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

Action of the State Engineer
Approval Code: A Approved
Action Date: 08/26/1985
log due date: 08/15/1986
State Engineer:
By:

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 29N Range: 11W Sections: 2,,4,,34

NAD27 X: Y: Zone: Search Radius:

County: SJ Basin: SJ(San Juan) Number: Suffix:

ner Name: (First) (Last) Non-Domestic Domestic
All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 09/07/2007

						(Depth Water in Feet)		
Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg

Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 11W Sections: 33,,34,35

NAD27 X: Y: Zone: Search Radius:

County: SJ Basin: SJ(San Juan) Number: Suffix:

wner Name: (First) (Last) Non-Domestic Domestic
All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

POD / SURFACE DATA REPORT 09/07/2007

(qua
(qua

File Nbr	Use	(acre ft per annum) Diversion	Owner	POD Number

Records found, try again

3. 19.15.36.8C(3)

We have enclosed the names and addresses of the surface owners of the properties within one mile of the site perimeter.

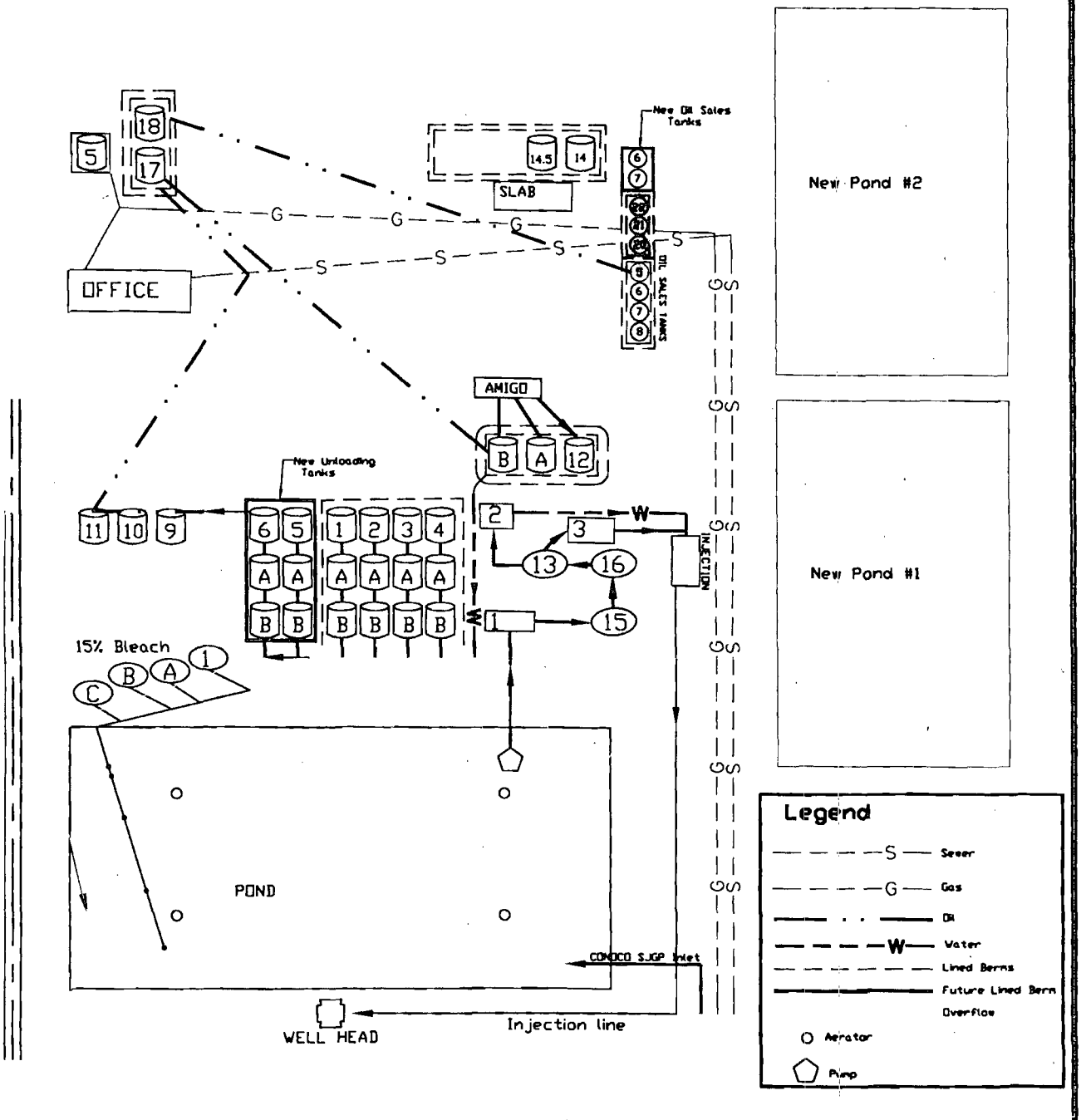
Owner	Address	City, State, Zip	Book	Page	ACCTTYPE
CRANE LEE M TRUSTEE	125 S POLLARD	AZTEC, NM 874102073	1238	799	Vacant Land
DRAKE TWANA AND LORRAINE	P O BOX 448	FLORA VISTA, NM 87415	1395	730	Commercial
DRAKE TWANA AND LORRAINE	P O BOX 448	FLORA VISTA, NM 87415	1380	563	Vacant Land
BANK ONE N A	1675 PALM BEACH LAKES BL	WEST PALM BEACH, FL 33401	1392	178	Residential
SIMKINS TRUCKING INC	P O BOX 1528	FARMINGTON, NM 87499	1311	315	Vacant Land
COURY JOHN J AND CANDACE	6651 US 64	BLOOMFIELD, NM 87413	1318	216	Residential
HOLLAR SAMUEL C ET UX	P O BOX 2016	BLOOMFIELD, NM 874132016	1204	839	Commercial
JONES AMY L	P O BOX 2775	BLOOMFIELD, NM 874132775	1399	897	Residential
EAVENSON CHARLES AND JOAN E	P O BOX 507	BLOOMFIELD, NM 874130507	1354	649	Residential
D AND C PROPERTIES LLC	PO BOX 1735	EUNICE, NM 88231	1375	27	Vacant Land
D AND C PROPERTIES LLC	PO BOX 1735	EUNICE, NM 88231	1375	27	Residential
D AND C PROPERTIES LLC	PO BOX 1735	EUNICE, NM 88231	1375	27	Commercial
D AND C PROPERTIES LLC	PO BOX 1735	EUNICE, NM 88231	1375	27	Commercial
D AND C PROPERTIES LLC	PO BOX 1735	EUNICE, NM 88231	1375	27	Commercial
FT DEFIANCE FUEL AND SUPPLY INC	920 E HWY 66	GALLUP, NM 87301	1297	716	Vacant Land
BLOOMFIELD CITY OF	P O BOX 1839	BLOOMFIELD, NM 874131839	1415	543	Exempt
WILLIAMS JORETTA W	P O BOX 1431	BLOOMFIELD, NM 874131431	1410	808	Residential
BLOOMFIELD CITY OF	P O BOX 1839	BLOOMFIELD, NM 874131839	1408	454	Exempt
WILLIAMS JORETTA W	P O BOX 1134	BLOOMFIELD, NM 87413	1410	811	Residential
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 87410	1415	916	Vacant Land
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 874100100	1170	506	Vacant Land
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 874100100	1415	916	Vacant Land
BLOOMFIELD CITY OF	P O BOX 1839	BLOOMFIELD, NM 87413	1408	453	Exempt
MC CONNEL WILLIAM E AND JERILYN R TRUST	P O BOX 941	AZTEC, NM 874100941	1408	950	Residential
MOSS JAKIE L AND MARY ANN	P O BOX 343	FLORA VISTA, NM 874150343	1424	386	Vacant Land
DIAL OIL COMPANY	PO BOX 430	AZTEC, NM 87410	1413	469	Commercial
ESTRADA FRANCISCO J	P O BOX 2124	BLOOMFIELD, NM 87413	1421	145	Residential
D J SIMMONS CO LTD PARTNERSHIP	1009 RIDGEWAY PL STE 200	FARMINGTON, NM 87401	1441	7	Commercial
CRANE GORDON N AND DORCAS A TRST ETAL	1009 RIDGEWAY PL STE 200	FARMINGTON, NM 87401	1426	898	Commercial
YOCUM DONALD P SR AND SUE TRUST	PO BOX 188	BLOOMFIELD, NM 87413	1332	785	Comm Mix
CHANDLER LARRY M	PO BOX 188	BLOOMFIELD, NM 87413	1333	776	Vacant Land
NATCO PETROLEUM INC	PO BOX 445	BLOOMFIELD, NM 87413	1168	566	Vacant Land
SCHAFFER FAMILY TRUST	P O BOX 23	AZTEC, NM 87410	1416	637	Residential
SCHAFFER FAMILY TRUST	P O BOX 23	AZTEC, NM 87410	1416	637	Residential
SCHAFFER FAMILY TRUST	P O BOX 23	AZTEC, NM 87410	1416	637	Residential

SCHAFFER FAMILY TRUST	P O BOX 23	AZTEC, NM 87410	1416	426	Residential
SCHAFFER FAMILY TRUST	P O BOX 23	AZTEC, NM 87410	1400	426	Residential
SCHAFFER FAMILY TRUST	P O BOX 23	AZTEC, NM 87410	1416	637	Residential
BLACK HILLS EXPLORATION AND PRODUCTION	350 INDIANA ST STE 400	GOLDEN, CO 80401	1429	189	Commercial
ADAMS DONALD C TRUST ETAL	3807 N SUNSET	FARMINGTON, NM 87401	1370	616	Vacant Land
AJAC ENTERPRISES	8359 CORONA LOOP NE STE	ALBUQUERQUE, NM 871131614	1313	634	Commercial
COURY JOHN J JR AND CANDACE M	6651 US 64	BLOOMFIELD, NM 87413	1431	933	Residential
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 874100100	1133	671	Vacant Land
JACQUEZ ORLANDO J ET UX	P O BOX 324	BLOOMFIELD, NM 874130324	916	584	Residential
ROTH LAVERNE L	P O BOX 83	FARMINGTON, NM 87499	1295	186	Vacant Land
MOSS AGUA LLC	P O BOX 343	FLORA VISTA, NM 874150343	1444	509	Vacant Land
MILLIKIN JAMES W ET UX	2120 JOY LYNN	BLOOMFIELD, NM 874136705	846	190	Residential
HAULRITE OF FOUR CORNERS INC	24 CR 2929	AZTEC, NM 87410	1378	938	Commercial
MOSS RUSSELL W AND MARTHA E	P O BOX 622	FLORA VISTA, NM 87415	1440	688	Vacant Land
HARTMAN EDWARD M TRUSTEE ET AL	1002 TRAMWAY LN NE	ALBUQUERQUE, NM 871221317	1144	537	Vacant Land
MANTLE MACK DUANE ET AL	1213 CAMINO MONTE	FARMINGTON, NM 87401	1294	203	Commercial
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 87410	1316	816	Vacant Land
MARTINEZ LEROY M ET AL	P O BOX 685	BLOOMFIELD, NM 87413	1270	178	Vacant Land
HENSON RILEY ET UX	P O BOX 1441	BLOOMFIELD, NM 87413	1284	560	Vacant Land
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 874100100	1139	363	Commercial
MC DANIEL GARY C ET UX	P O BOX 2225	BLOOMFIELD, NM 874132225	1160	104	Residential
TWIN STARS LTD	P O BOX 1469	FARMINGTON, NM 87499	1441	42	Commercial
WILLIAMS JORETTA W	2 CR 5499	FARMINGTON, NM 87401	1418	957	Residential
COURY JOHN J ET UX	6651 US 64	BLOOMFIELD, NM 87413	1264	67	Vacant Land
BENNY ALVIN ET AL	P O BOX 1044	BLOOMFIELD, NM 874131044	1297	716	Residential
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 87410	1316	815	Vacant Land
LITKE IRVIN L TRUSTEES	P O BOX 518	BLOOMFIELD, NM 874130518	1140	657	Residential
RANEY KENNETH N ET UX	P O BOX 2122	BLOOMFIELD, NM 874132122	1145	163	Res Mix
F&B L L C	PO BOX 187	BLOOMFIELD, NM 87413	1241	198	Commercial
F&B L L C	PO BOX 187	BLOOMFIELD, NM 87413	1241	198	Commercial
F&B L L C	PO BOX 187	BLOOMFIELD, NM 87413	1241	198	Commercial
FOUTZ AND BURSOM CONST CO INC	P O BOX 187	BLOOMFIELD, NM 87413	1318	434	Commercial
BIG BLACK DOG LLC	25528 GENESEE TR RD	GOLDEN, CO 80401	1424	398	Commercial
BIG BLACK DOG LLC	25528 GENESEE TR RD	GOLDEN, CO 80401	1424	398	Vacant Land
BASIN DISPOSAL INC	P O BOX 100	AZTEC, NM 874100100	1154	777	Residential
BASIN DISPOSAL	P O BOX 100	AZTEC, NM 874100100	1154	777	Vacant Land
MARTINEZ LEROY ET AL	P O BOX 685	BLOOMFIELD, NM 874130685	1274	244	Residential
HARRISON DANNY	P O BOX 295	BLOOMFIELD, NM 874130295	1170	859	Residential
RAY JESSE W	P O BOX 2551	BLOOMFIELD, NM 874132551	1211	965	Residential
CARTER MARGARET L	P O BOX 681	BLOOMFIELD, NM 874130681	1297	716	Residential

[illegible]					
COURY JOHN J JR AND CANDACE	P O BOX 937	AZTEC, NM 87410	1417	[illegible]	Commercial
DE HERRERA ROCKY L AND JACQUELINE	922 W MAIN	BLOOMFIELD, NM 87413	1423	743	Vacant Land
COURY JOHN J JR AND CANDACE M	PO BOX 2521	BLOOMFIELD, NM 87413	1320	666	Residential
COURY CANDACE M	6651 US 64	BLOOMFIELD, NM 87413	1306	45	Residential
BDI LAND LLC	506 W ARRINGTON	FARMINGTON, NM 87401	1437	745	Residential
BDI LAND LLC	506 W ARRINGTON	FARMINGTON, NM 87401	1438	412	Residential
PETROLITE CORP	P O BOX 92108	AUSTIN, TX 78709	1148	400	Commercial
DE HERRERA ROCKY L AND JACQUELINE J	922 W MAIN	BLOOMFIELD, NM 874136180	1422	600	Commercial
CARTER MARGARET L	P O BOX 681	BLOOMFIELD, NM 874131283	1346	1015	Vacant Land
TURNBAUGH MICHAEL J AND KIM L	9321 N 136 E AVE	OWASSO, OK 74055	1455	840	Vacant Land
MOORE LARRY G AND B CAROL TRUST	502 E SMITH LN	BLOOMFIELD, NM 87413	1460	632	Vacant Land
WILLIAMS JORETTA W	PO BOX 1601	AZTEC, NM 87410	1440	441	Residential
WILLIAMS JORETTA W	PO BOX 1601	AZTEC, NM 87410	1440	441	Residential
COURY JOHN J JR AND CANDACE M	6651 US 64	BLOOMFIELD, NM 87413	1458	78	Vacant Land
PASCETTI INVESTMENTS LLC	34940 HWY 550 NORTH	DURANGO, CO 81301	1379	865	Vacant Land
PASCETTI INVESTMENTS LLC	34940 HWY 550 NORTH	DURANGO, CO 81301	1379	865	Commercial
PASCETTI INVESTMENTS LLC	34940 HWY 550 NORTH	DURANGO, CO 81301	1379	865	Commercial
HENSON RILEY AND PAULINE	P O BOX 1441	BLOOMFIELD, NM 87413	1351	561	Vacant Land
DAVIS DONALD L AND JOANN	323 CR 4990	BLOOMFIELD, NM 87413	1355	623	Commercial
YOAKUM ROBERT L	614 SMITH	BLOOMFIELD, NM 87413	1453	64	Commercial
GURULE MACK R	P O BOX 1024	BLOOMFIELD, NM 874131024	1452	793	Vacant Land
CHENAULT CONSULTING INC	PO BOX 328	BLOOMFIELD, NM 87413	1430	604	Vacant Land
CHENAULT CONSULTING INC	PO BOX 328	BLOOMFIELD, NM 87413	1430	604	Vacant Land
WINER STEVEN J AND KATHERINA L	P O BOX 2055	DURANGO, CO 813022055	1347	13	Commercial
MESA WELL SERVICING LP	PO BOX 1620	HOBBS, NM 88241	1422	201	Vacant Land
INTERMOUNTAIN CRANE LLC	2730 N NELLIS BLVD	LAS VEGAS, NV 891154507	1344	542	Vacant Land
THORNTON DAVID	P O BOX 1963	BLOOMFIELD, NM 874131963	1317	816	Commercial
THORNTON DAVID	6990 FOOTHILLS DR	FARMINGTON, NM 87402	1448	489	Vacant Land
PHILLIPS JIM R AND LAURA V TRUST	828 CR 4990	BLOOMFIELD, NM 87413	1446	291	Vacant Land
STINSON JOHNNY R AND MACHELLE A	P O BOX 618	AZTEC, NM 87410	1370	379	Commercial
WILLIAMS JORETTA W	P O BOX 1902	BLOOMFIELD, NM 87413	1353	666	Residential
PASCETTI INVESTMENTS LLC	34940 HWY 550 NORTH	DURANGO, CO 81301	1368	1142	Commercial
PHILLIPS JIM R AND LAURA V TRUST	791 N NEWBY LN	BLOOMFIELD, NM 874136755	1363	497	Vacant Land
CARTER MARGARET L	P O BOX 681	BLOOMFIELD, NM 87413	1361	1031	Vacant Land
PARTNERS IV LLC	712 FORD ST	AZTEC, NM 874102067	1364	720	Commercial
NEW MEXICO STATE HWY COMM	P O BOX 1149	SANTA FE, NM 875041149	427	192	Exempt
GRADY MICHAEL E	1621 E MURRAY	FARMINGTON, NM 87401	1451	815	Commercial
HORTON ALICIA A AND DANIEL K	PO BOX 105	BLOOMFIELD, NM 87413	1343	879	Residential
PHILLIPS JIM R AND LAURA V TRUST	791 NEWBY LN	BLOOMFIELD, NM 87413	3	1335	Vacant Land

PHILLIPS JIM R AND LAURA V TRUST	[redacted]				
TURNBAUGH MICHAEL J AND KIM L	9321 N 136 E AVE	OWASSO, OK 74055	1455	840	Vacant Land
CRANE LEE ANNE AND LEE M JR	P O BOX 83	BLOOMFIELD, NM 874130083	1355	759	Residential
NATIONAL TANK COMPANY	2950 N LOOP WEST STE 750	HOUSTON, TX 77092	1372	714	Vacant Land
NATIONAL TANK COMPANY	2950 N LOOP WEST STE 750	HOUSTON, TX 77092	1372	715	Commercial
RAINBOW TRUST	2602 W 16TH ST	PLAIN VIEW, TX 79072	1455	309	Vacant Land
CARTER MARGARET L	734 CR 4990	BLOOMFIELD, NM 87413	1455	450	Vacant Land
CARTER MARGARET L	734 CR 4990	BLOOMFIELD, NM 87413	1455	450	Vacant Land
SFT LLC	P O BOX 25865	ALBUQUERQUE, NM 87125	1454	413	Vacant Land
SFT LLC	P O BOX 25865	ALBUQUERQUE, NM 87125	1454	413	Commercial
NATIONAL TANK COMPANY	2950 N LOOP WEST STE 750	HOUSTON, TX 77092	1372	714	Vacant Land
CARTER MICHAEL W	P O BOX 555	BLOOMFIELD, NM 874131283	1297	716	Residential
CARTER MIKE	P O BOX 555	BLOOMFIELD, NM 87413	1361	1033	Vacant Land
COURY JOHN J JR AND CANDACE M	6651 US 64	BLOOMFIELD, NM 87413	1458	78	Residential
ADAMS DONALD C TRUST ET AL	3807 N SUNSET AVE	FARMINGTON, NM 874019239	1370	627	Vacant Land
ADAMS DONALD C TRUST ETAL	3807 N SUNSET AVE	FARMINGTON, NM 874019239	1370	626	Vacant Land
BYARS RAYMOND M ETAL	9321 N 136 E AVE	OWASSO, OK 74055	1453	598	Commercial
BDI LAND LLC	P O BOX 1982	FARMINGTON, NM 87499	1452	488	Residential
HOLLAR SAMUEL C ET UX	P O BOX 2016	BLOOMFIELD, NM 874132016	1284	958	Residential

BASIN DISPOSAL FACILITY



CHENEY·WALTERS·ECHOLS INC.
ENGINEERS · SURVEYORS
9 W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303

ISSUE DATE: 09/17/2007
PRINTED: September 20, 2007
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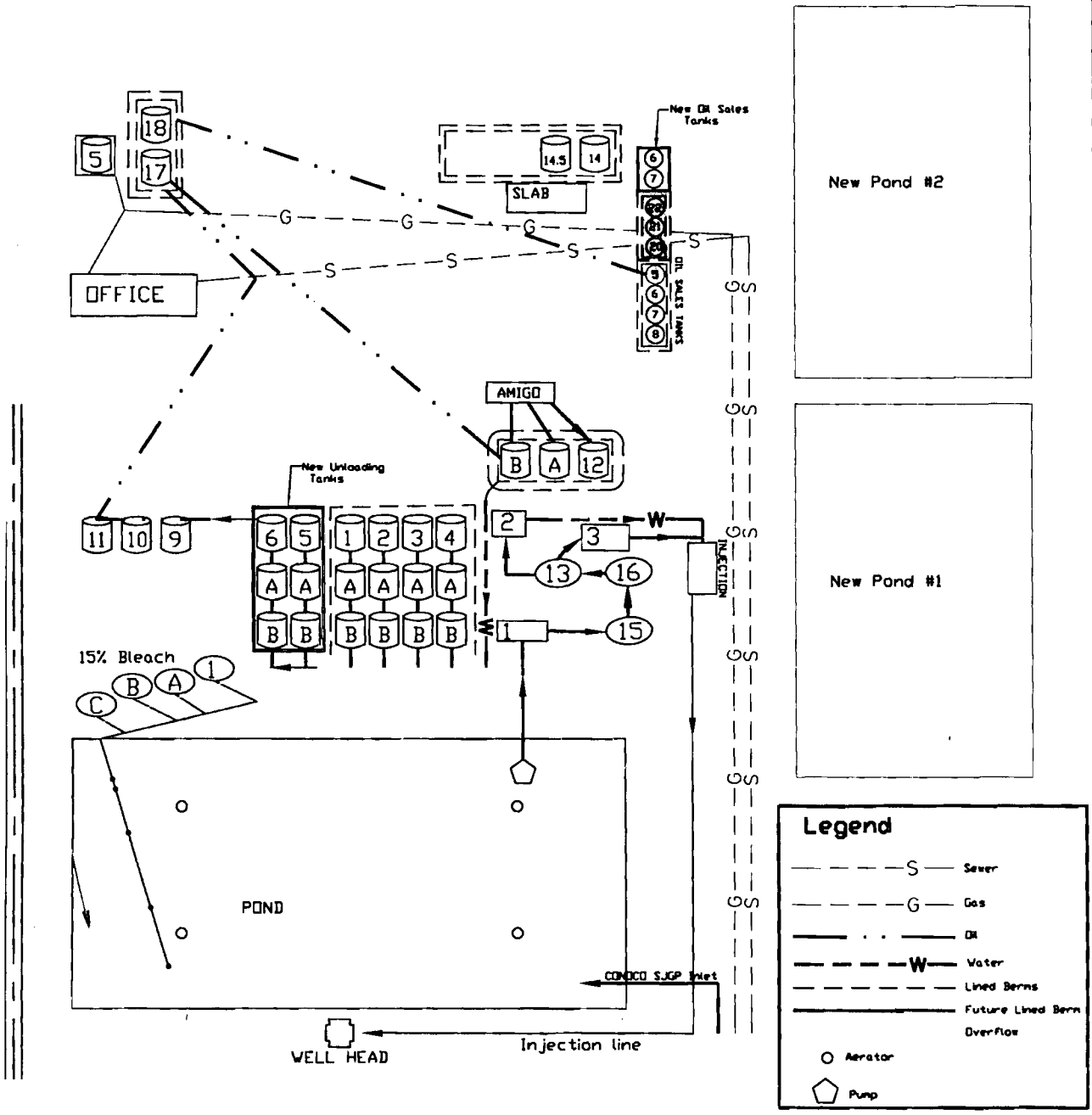
BASIN DISPOSAL FACILITY



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FACILITY INVENTORY

A) EXISTING:

Filter House - 1, 2, 3
Unloading Tanks - 1-4, A & B Each - 400 BBL Tanks
Oil Junk Tanks - 14, 14.5 - 210 BBL Each
Oil Sales Tanks - 6, 7, 8 - 400 BBL Tanks Each
Oil Skimmer Tanks - 9, 10, 11 - 400 BBL Tanks Each
Fresh Water Tanks - 21, 15, 16 - 400 BBL Tanks Each
15% Bleach Tanks - 1, A, B, C - 3,200 Gallon Each
Oil Heater Tanks - 17, 18 - 500 BBL Tanks Each

B) PROPOSED ADDITIONS UNDER NEW PERMIT:

Oil Heater Tank - 5 - 500 BBL Tank
Unloading Tanks - 5, 6, A & B Each - 400 BBL Tanks Each
Oil Sales Tanks - 6, 7 - 400 BBL Tanks Each
Evaporation Ponds - #1, #2 - Approximately 175' Wide x 300' Long x 7' Deep (3' freeboard)
Sludge Holding Tank - 400 BBL Tank

FACILITY INVENTORY

A) EXISTING:

Filter House - 1, 2, 3
Unloading Tanks - 1-4, A & B Each - 400 BBL Tanks
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OVERVIEW OF FACILITIES

The Basin Disposal facility was constructed in 1985 and operations began n 1987. Basin Disposal separates oil and sediment from produced water from ɔil and gas production and exploration. Produced water is processed through ɡravity separation of solids within tanks aerated within a lined lagoon and then ƒiltered (20 and 5 micron) prior to its injection into a permitted well. The facility ıs located inside the city limits of Bloomfield, New Mexico. Approximately 10,000-11,000 barrels of produced water is processed daily at the facility.

Produced water is routinely collected by trucking contractors and delivered to Basin Disposal from RWP and RCG facilities located on the Southern Ute Indian Reservation and in New Mexico (RWP only). All waste is tracked by tickets completed by the trucking contractor. Additionally, a waste manifest is completed at Basin Disposal for each load (which is signed by the driver and Basin Disposal attendant). Basin Disposal also maintains a log of deliveries.

Oil and sediment that is retrieved from initial gravity separation is processed through additional gravity separation in two tanks, while being circulated through a heating process. Oil recovered from processed water is stored in seven oil cell tanks and is currently sold to Giant Industries (Western Refining, Inc., and Petro Source). The sludge is stored in two tanks adjacent to a concrete lined and sloped pit. The sludge settles, is drained from the tanks and allowed to separate in a lined pit; any water can be drawn off the top and reprocessed. Sludge is transported to Industrial Ecosystems, Inc., (EIE) in Bloomfield, New Mexico. EIE operates a land farm for bio-remediation of petroleum impacted soils, sediments and sludge. Sludge was formally mixed with clean soils on the western portion of the facility prior to land farming. Sludge mixing operations ceased approximately 1 year ago. Four poly tanks store biocide (bleach "sodium hypochlorite") that is added to the lined pond to prevent algae growth.

Basin Disposal owns and operates the facility which consists of approximately 30 fenced acres of land owned by the operator. The facility is operated and manned 24-hours a day nearly every day of the year. The vender and facility are described as follows: Basin Disposal, Inc., 200 Montana Drive, Bloomfield, New Mexico, 87413.

5. 19.15.36.8C(5)

Plans for the proposed two pond expansions are enclosed.

07111

GE Infrastructure
Water & Process Technologies

Jack W. Lambert
Area Manager
GE Betz

C 970-749-8355
T 970-382-9089
F 970-382-3830
John.lambert@ge.com

John Volkerding
Basin Disposal, Inc
906 South Main Street
Aztec, New Mexico 87410

April 1, 2007

Dear John,

Subject:: Treatment Regimen for Produced Water Feasibility and Impact Review

Please find following our summary overview of the initial feasibility assessment regarding membrane technology treatment of the produced water at Basin Disposal, Inc. This feasibility assessment discusses the following:

- Anticipated pretreatment requirements
- Water balance impacts of the introduction of membrane treatment
- Budgetary cost estimations for equipment components
- Budgetary cost estimate for pilot study
- Develop estimations of generated waste streams

The characteristics of the produced water place great demands on pretreatment ahead of the membrane treatment process. The flow path would look something like this:

Oily Water Separator → ZeeWeed ™ MBR → HP Reverse Osmosis

The oily water separator would skim any free hydrocarbons from the influent stream. Membrane Bioreactor (MBR) combines membrane technology with biological treatment. The patented process combines conventional clarification, aeration and filtration into a single step. The result is high quality effluent for feed to the high pressure R.O for TDS reduction.

MBR Typical Treatment Results	
COD reduction	>90%
BOD reduction	>98%
TSS reduction	>99%
TKN/Ammonia reduction	>90%
Phosphorous reduction	>90%

Assuming a produced water inlet flow rate of 12,000 barrels/day or roughly half-million gallons/day, there would be approximately 50% recovery of fresh, low TDS water. The MBR process will account for a small loss (solids in the form of TSS) with the high-pressure R.O. recovery being 50-55%. HP R.O is the same process used for seawater desalinization and is required for your high TDS water.

The permeate water coming off the R.O. would be suitable for use by industrial processes and the reject, or waste water would be roughly twice the TDS of the influent.

Where this technology has been applied previously the installed cost is approximately $5.00/barrel or $0.12/gallon including operating personnel. Should Basin decide that they have the resources to operate the plant, the cost would be lower.

Each of these installations is unique, and therefore a MBR pilot study would be required on your plant site. We estimate this would require 6 months to complete, with an operator provided at a cost of roughly $25,000/month.

The next step, should you decide to move forward would be additional water analysis including grid #91 and oil & grease (done by our Customer Service Lab) and BOD, COD, TKN/Ammonia (done by 3rd party lab). We would coordinate weekly samples over a 4-6 week period.

The overall goal of this study was to establish the potential for membrane system applications as suitable for treatment of the produced water, and to provide budgetary cost estimates for your consideration. I hope that this meets your current needs and look forward to talking with you in the near future.

Sincerely,

Jack Lambert
GE Betz

Cc: Charles Muir, GE Betz
Dewitt Dees, GE Zenon
Steve Easterly, GE Betz

1.0 Project Overview

Beaird Company is pleased to submit a proposal to provide one multi-stage flash (MSF) water concentration plant. Each Beaird Model MSF-190 plant is designed to reduce 5,000 BBL/Day to 498 BBL/Day brine for disposal.

The Model MSF-190 is energy efficient, using only 3.9 x 10^6 Btu/Hr to generate 65,605 lbs/Hr. of distillate water.

Beaird's scope of supply for the complete MSF plant is detailed in the following Section 3.0 of this proposal. Installation supervision, commissioning and start-up services are included can be provided at Beaird standard daily rate.

2.0 Process Selection and Description

Beaird model MSF-190 is a Multiple Stage Flash Evaporation plant, a proven standard design of Beaird Co with more then 70 years of successful operation.

Beaird's MSF plant is a clean and reliable design. Un-like evaporators which boil water on a heat transfer surface with potential local over-concentration and precipitation of calcium sulfate' CaSO4, the MSF is designed to heat water in tubes and flash the hot water in the shell, thereby eliminating "super-saturation" in the heat exchanger tubes and elimination of scale forming on the heat transfer tubes.. With the Beaird Co. design, CaSO4 (Calcium Sulfate) scale removal is hardly necessary.

The vapor produced by the flashing in each stage passes through mist eliminators and condenses on the surface of the cooler tubes. The distillate is collected and removed from the process. The condensing vapor helps to heat the water within the tubes. This pre-heated water (within the tubes) eventually becomes the feed to the brine heater where it is heated to its "top temperature". As the heated water passes from stage to stage and flashes, it becomes more concentrated and the temperature drops slightly with each flashing. Control of the concentrate within, the MSF plant is provided by blow-down of a portion of the concentrate from the last stage of the plant.

The heat source for the MSF plant is a gas-fired boiler to provide steam at 150 psig.

3.0 Scope of Supply:

Equipment Supply	Beaird	By Others
MSF plant	X	
Brine heater	X	
Chemical Addition System	X	
Exhaust Gas boiler	X	
Brine pump & motor	X	
Distillate pump & motor	X	
Concentrate Blow Down pump & motor	X	
Relief Valves	X	
Instrumentation / control	X	
Local Control Panel	X	
2-Stage vacuum Ejector	X	
Skid steelwork and supporting structures	X	
Commissioning on site (at BeairdCo standard service rate	X	
Training (at BeairdCo Standard Service Rate)	X	
Start-up Services (At BeairdCo Standard Service Rate)	X	
Chemicals for Start-up		X
Electricity for Start-up		X
Installation and Erection		X
Site preparation		X

4.0 Process Parameters

4.1 Process Flows for one (1) MSF-190

	#/hr	psig	^{0}F	ppm TDS
Feed Water	72,891	60	90	< 20,000
Distillate	65,602	30	113.8	max 25
Brine out	7,289	20	113.8	180,000
Steam	3,266	150		

4.2 Power Consumption

Device	KW
Distillate Pump	5
Brine Pump	6
Condensate Pump	3
Rec Pump	45
Chem Feed	.5
Total:	**59.5**

5.0 Process Control:

The Beaird Model MSF-190 seawater desalination plant is designed to operate automatically with a minimum of operator intervention. The unit is equipped with alarms and automatic shut-down. Auto shut-down is initiated with either low feed water flow or high brine level. Start-up and change-over from standby to duty position is done locally and manually by the operator.

5.1 With either low feed water flow or high brine level, the following will shut down:

5.1.1 Boiler steam inlet valve

5.1.2 Distillate pump

5.1.3 Concentrate pump

5.1.4 Condensate Pump

5.2 The following are automatically controlled:

5.2.1 Diverting of distillate

5.2.2 Brine heater level

5.2.3 Condenser distillate level

5.3 Failure to start or trip alarms are provided for:

5.3.1 Distillate pump

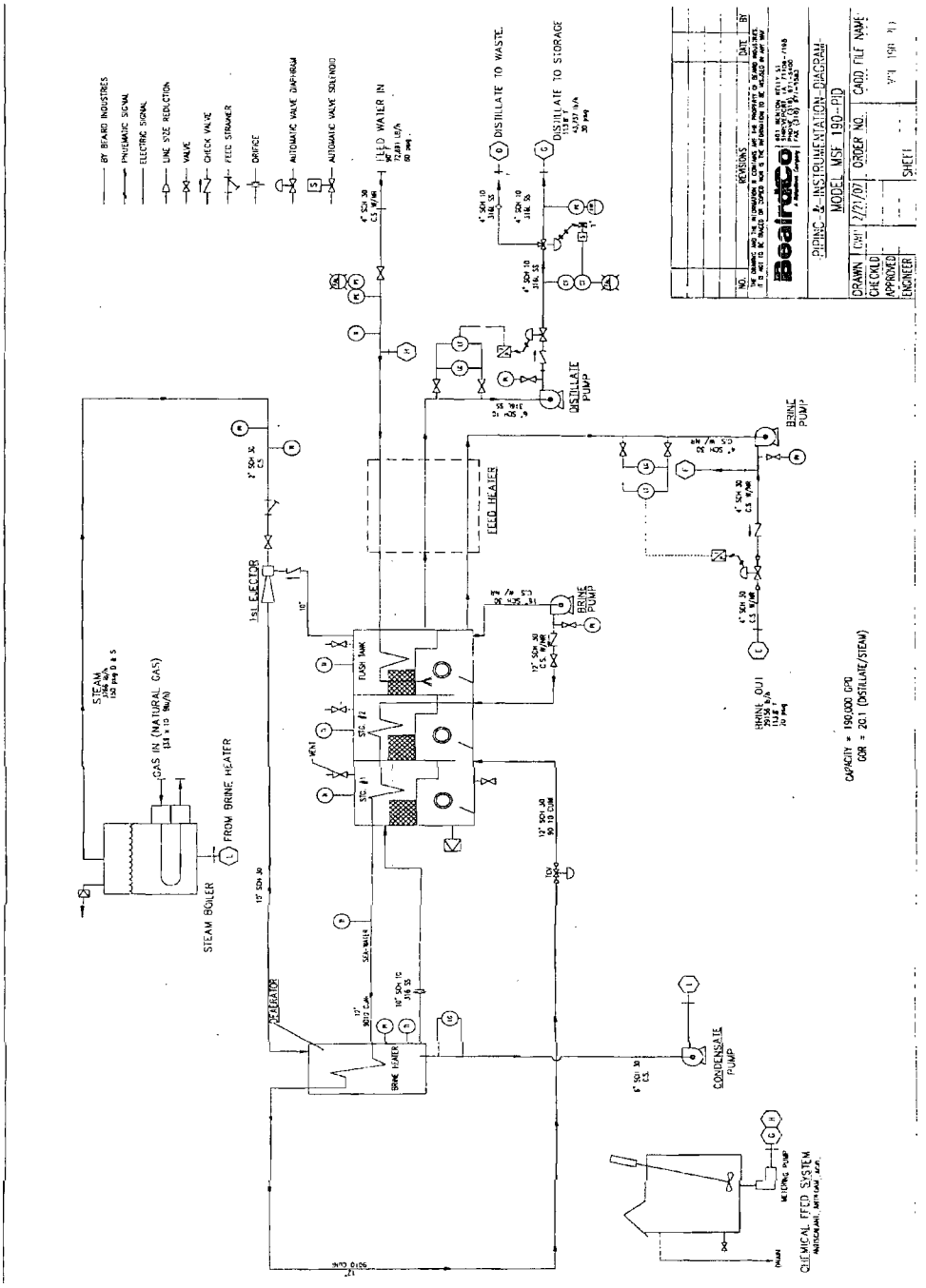
5.3.2 Brine pump

5.3.3 High conductivity alarm

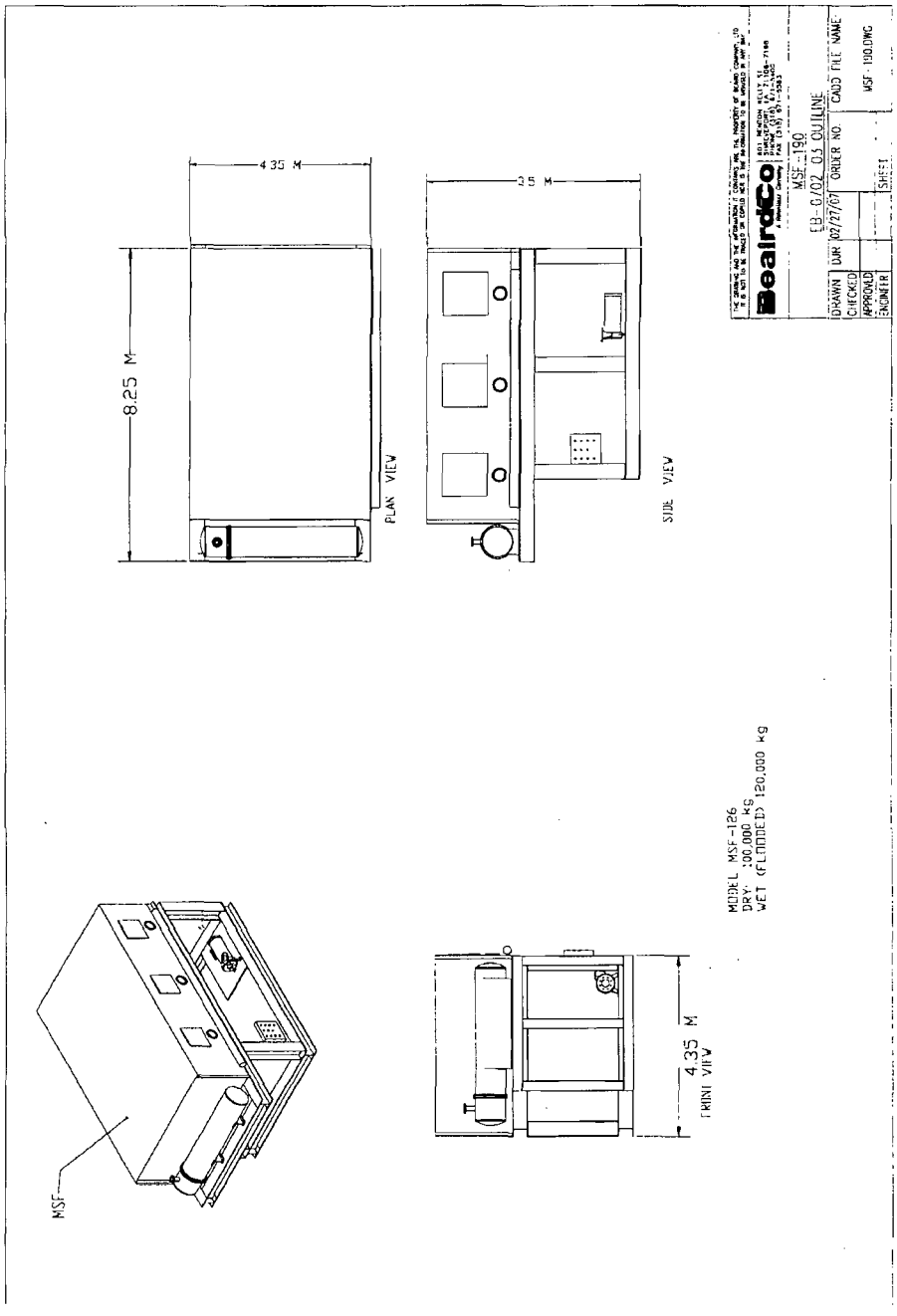
6.0 Materials of Construction:

6.1	**Evaporator**	
6.1.1	Multi-stage condensers	
	Shell	Carbon Steel
	Tubes	CuNi 9010
	Tubesheets	CuNi 9010
	Steam and Distillate Boxes	CuNi 9010
6.1.2	Demister	316L SS
6.1.3	Brine Heater	
	Shell	Carbon Steel
	Tubes	CuNi 90 10
	Tubesheet	CuNi 90 10
	Water box	CuNi 90 10
6.1.4	Steam Ejectors	316L SS
6.2	Pumps	
6.2.1	Centrifugal pumps (distillate, brine and condensate)	
	Casing	Stainless Steel
	Impeller	Stainless Steel
	Shaft	316L SS
	Wear parts	316L SS
6.3	**Chemical feed system**	
	Liquid end body	316 L SS
	Valves, seats, ball, connections	316 SS
	Diaphragm	PTFE
	Chemical storage tank	316L SS
6.4	**DIMENSIONS AND WEIGHTS**	
6.4.1	L x W x H MSF vessel	42' x 7' x 11.5'
6.4.2	Net weight Each	
	Dry (shipping weight)	74,000 lbs
	Wet (flooded)	86,000 lbs

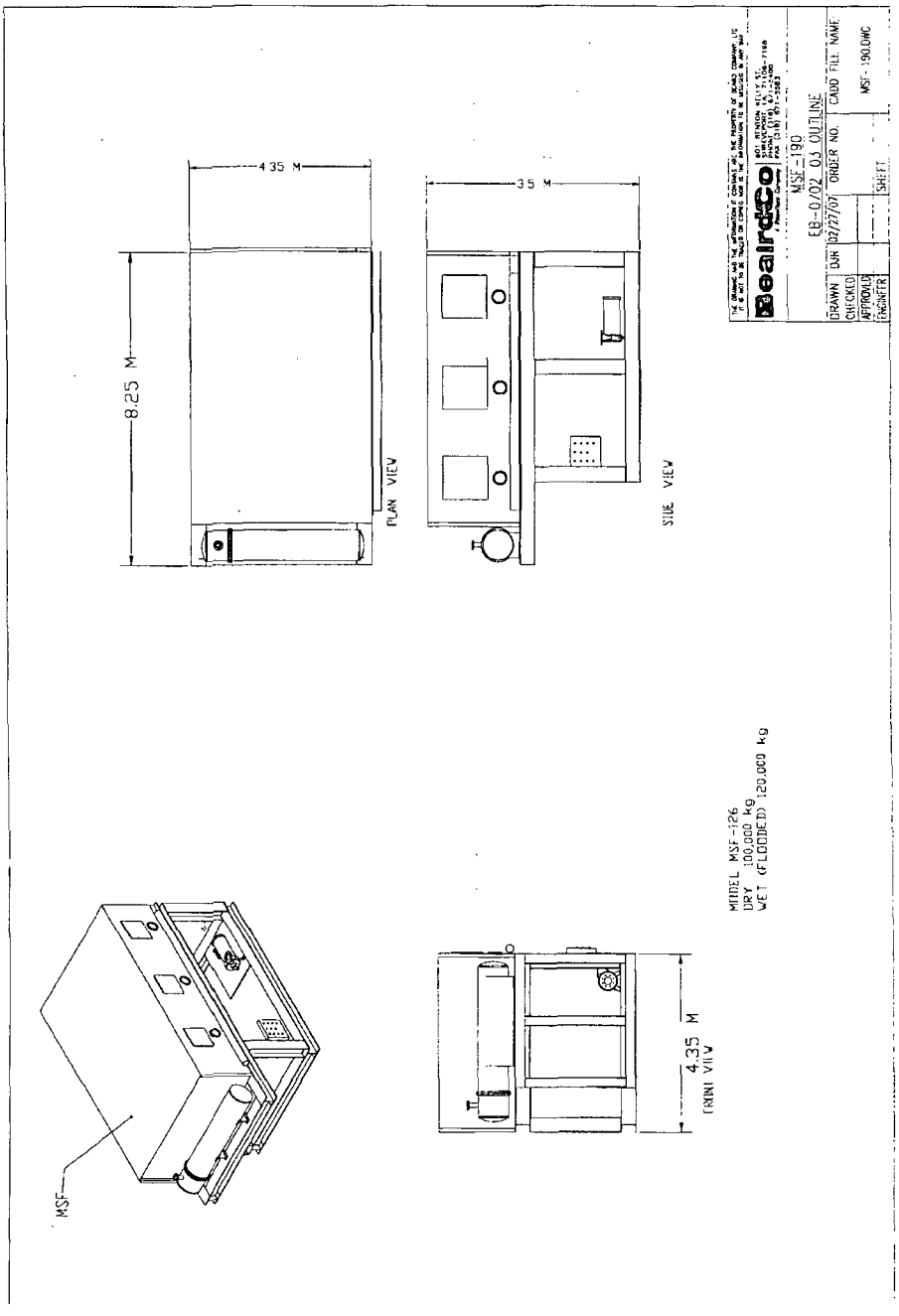
9.1 PROCESS FLOW DIAGRAM:



9.2 OUTLINE AND SETTING:



9.2 OUTLINE AND SETTING:



10.0 BEAIRD ENGINEERING AND CUSTOMER LIST:

10.1 Engineering Capabilities:

ANSYS™ Finite Element Analysis

Proprietary Design Program for Wind Towers

Algor™

HTRI™ heat Exchanger Software

Compress™ (Pressure Vessel Design Software)

Solid Works™ 3-D Design and rendering software (drawing preparation)

AutoCAD™ (drawing preparation)

10.2 Certifications:

ISO 9001:2000 in progress

ASME Stamps: H, S, U, U2, R, NQA1

National Board of Boiler Pressure Vessel Inspectors

Chinese Safety Quality License

Germanisher Lloyd Certification for 50-meter and 65 meter tubular steel wind towers

103 Existing Customers:

PROJECT	PURCHASER	COUNTRY	CAPACITY Each (GPD)	TYPE	MODEL	STAGES	Eco.
Castle Harbour	Bermuda Properties	Bermuda	30,000	MSF	16A-16	16	3.0
Nassau	Bacardi & Company	Bahamas	100,000	MSF	24B-16	16	6.0
Grotto Bay		Bermuda	25,000	MSF	16A-8	8	3.0
Frenchman's Reef	Holiday Inns	U.S. Virgin Islands	40,000	MSF	(2) 16A-16	16	6.0
Pertimina	Refining Associates	Indonesia	70,000		24A-16	16	6.0
Semarang I	PLN	Indonesia	36,000	TCF	1-TCF-36	1	0.9
Semarang II	PLN	Indonesia	72,000	MSF	24D-6	6	2.8
Pertimina	Refining Associates	Indonesia	70,000	MSF	24A-16	16	6.0
Muara Karang I	PLN	Indonesia	72,000	MSF	(2) 24D-6	6	3.0
Muara Karang II	PLN	Indonesia	72,000	TCF	1-TCF-72	1	0.9
Ras Al Mish'ab I	Corp of Engineers (Santa Fe Int.)	Saudi Arabia	85,000	MSF	24B-16	16	6.0
Maura Karang III	PLN	Indonesia	72,000	MSF	24D-6	6	3.0
Maura Karang IV	PLN	Indonesia	216,000	MSF	24C-16	16	6.0
Ras Al Mish'ab II	Corps of Engrs. (Hyundai)	Saudi Arabia	85,000		24B-16	16	6.0
McMurdo Sound	ITT Antarctic	Antarctica	40,000	MSF	(2) 18A-16	16	6.0
Masirah Island	Corps of Engrs. (Dillingham)	Sultanate of Oman	70,000	MSF	(2) 24A-16	16	6.0
Main Pass Mine	Freeport McMoRan	U.S.A.	84,400	MSF	(2) 24A-3	3	2.2
Ascension Island	Caddell Construction	Ascension Island UK	60,000	MSF	22A-16	16	6.0
Marmara	Black & Veach Int'l	Turkey	145,300	MSF	(2) 32A-20	20	8.0

103 Existing Customers:

PROJECT	PURCHASER	COUNTRY	CAPACITY Each (GPD)	TYPE	MODEL	STAGES	Eco.
Castle Harbour	Bermuda Properties	Bermuda	30,000	MSF	16A-16	16	3.0
Nassau	Bacardi & Company	Bahamas	100,000	MSF	24B-16	16	6.0
Grotto Bay		Bermuda	25,000	MSF	16A-8	8	3.0
Frenchman's Reef	Holiday Inns	U.S. Virgin Islands	40,000	MSF	(2) 16A-16	16	6.0
Pertimina	Refining Associates	Indonesia	70,000		24A-16	16	6.0
Semarang I	PLN	Indonesia	36,000	TCF	1-TCF-36	1	0.9
Semarang II	PLN	Indonesia	72,000	MSF	24D-6	6	2.8
Pertimina	Refining Associates	Indonesia	70,000	MSF	24A-16	16	6.0
Muara Karang I	PLN	Indonesia	72,000	MSF	(2) 24D-6	6	3.0
Muara Karang II	PLN	Indonesia	72,000	TCF	1-TCF-72	1	0.9
Ras Al Mish'ab I	Corp of Engineers (Santa Fe Int.)	Saudi Arabia	85,000	MSF	24B-16	16	6.0
Maura Karang III	PLN	Indonesia	72,000	MSF	24D-6	6	3.0
Maura Karang IV	PLN	Indonesia	216,000	MSF	24C-16	16	6.0
Ras Al Mish'ab II	Corps of Engrs. (Hyundai)	Saudi Arabia	85,000		24B-16	16	6.0
McMurdo Sound	ITT Antarctic	Antarctica	40,000	MSF	(2) 18A-16	16	6.0
Masirah Island	Corps of Engrs. (Dillingham)	Sultanate of Oman	70,000	MSF	(2) 24A-16	16	6.0
Main Pass Mine	Freeport McMoRan	U.S.A.	84,400	MSF	(2) 24A-3	3	2.2
Ascension Island	Caddell Construction	Ascension Island UK	60,000	MSF	22A-16	16	6.0
Marmara	Black & Veach Int'l	Turkey	145,300	MSF	(2) 32A-20	20	8.0

GE Infrastructure

Water & Process Technologies

WATER ANALYSIS REPORT

BASIN DISPOSAL
Aztec, NM

Sampled: 04-AUG-2006
Reported: 16-AUG-2006
Field Rep: Lambert, John W
91000497

	POST FILT PROD. WTR Q0808025
Potassium, as K, ppm	571
Aluminum, Total, as Al, ppm	0.1
Manganese, Total, as Mn, ppm	0.47
Nitrate, as NO_3, ppm	< 1
Phosphate, Total, as PO_4, ppm	5.3
Silica, Total, as SiO_2, ppm	22
Fluoride, as F, ppm	< 0.1
Lead, Total, as Pb, ppm	0.019
Mercury, Total, as Hg, ppb	1.0
Carbon, Total Organic, as C, ppm	549
Turbidity, NTU	47
Hexane Extractable Material, mg/l	48

GE Infrastructure

Water & Process Technologies

WATER ANALYSIS REPORT

BASIN DISPOSAL
Aztec, NM

Sampled: 04-AUG-2006
Reported: 16-AUG-2006
Field Rep: Lambert, John W
91000497

	POST FILT PROD. WTR Q0808025
Particle Size Distribution	A
Ammonia, Free And Fixed, as N, ppm	35
pH	6.9
Specific Conductance, at 25°C, µmhos	22400
Alkalinity, "P" as $CaCO_3$, ppm	0
Alkalinity, "M" as $CaCO_3$, ppm	1370
Sulfur, Total, as SO_4, ppm	978
Chloride, as Cl, ppm	7600
Hardness, Total, as $CaCO_3$, ppm	497
Calcium Hardness, Total, as $CaCO_3$, ppm	347
Magnesium Hardness, Total, as $CaCO_3$, ppm	129
Barium, Total, as Ba, ppm	3.1
Strontium, Total, as Sr, ppm	16.5
Copper, Total, as Cu, ppm	< 0.05
Iron, Total, as Fe, ppm	6.9
Sodium, as Na, ppm	4970

6. 19.15.36.8C(6)

A copy of the Oilfield Waste Acceptance Criteria Policy is enclosed.

Oil Field Waste Acceptance Criteria Policy

21.1 *Introduction*

The Basin Disposal Oil Field Waste Acceptance Criteria Policy was developed to ensure compliance with waste acceptance criteria of the State of New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division (EMNRD/OCD) and internal Basin Disposal requirements.

21.2 Scope

The Basin Disposal Oil Field Waste Acceptance Criteria Policy applies to any Basin Employee who has the potential to accept oil field waste.

21.3 *Purpose*

The Basin Disposal Oil Field Waste Acceptance Criteria Policy enhances awareness and establishes measures to ensure plant operations are in compliance with EMNRD/OCD rules, permit conditions, and company requirements.

21.4 *Required Forms*

1. Authorization to Move Produced Water, C-133
2. Certificate of Waste Status, C-138
3. Basin Disposal Ticket, SJRP Form 168-6
3. Disposal Log Book, SJRP Form 168-7

21.5 *Policy*

i. Every truck load of water that arrives at Basin Disposal, shall be inspected by a Basin employee.

ii. Disposal at Basin Disposal shall occur only when an attendant is on duty.

iii. Inspection shall consist of:
   a. Gauging the tank to determine if compressor oil, other lubricants, or excessive solids are present.
   b. Examining the driver paperwork and/or Basin Disposal records to ensure Basin Disposal is in the possession of a current valid Certificate of Waste Status
   c. Examining the driver paperwork and/or Basin Disposal records to ensure Basin Disposal is in the possession of a current valid Authorization to Move Produced Water

iv. Inspection may also consist of conducting an H2S survey using a calibrated H2S detector (see Basin H2S Policy for procedure):

v. If gauging reveals the presence of oils or excessive solids:
   a. A sample of the truck contents will be collected and identified with the date, location, company, and hauler.
   b. The truck will not be allowed to unload its contents at Basin Disposal.
   c. The Plant Manager and/or Assistant Manager on duty will be informed.

vi. If examination of the paperwork reveals the absence of a valid or current Certificate of Waste:

a. The truck will not be allowed to unload its contents at Basin Disposal until a valid current Certificate of Waste is provided.
b. The Plant Manager and/or Assistant Manager on duty will be informed.

vii. Waste Status Certificates are required per company for each location at least:
a. Produced Water: Monthly
b. Flowback/Reserve Pit: Monthly
c. Gathering Line Pigging: Monthly
d. All other Non-Exempt Wastes: Per Load

viii. The Basin Ticket contains the following language certified by the driver:
I do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, any and all waste delivered to Basin Disposal Inc. from the above locations is: EXEMPT oilfield waste. This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

ix. Upon receipt of oil field waste, Basin employees shall record the following information into the disposal logbook:
a. Generator
b. Location of origin
c. Volume and type of oil field waste
d. Date of disposal
e. Hauling company

x. The Basin Disposal Logbook shall be retained for a period of not less than five years after Basin Disposal's closure and subject to EMNRD/OCD inspection.

7. 19.15.36.8C(7)

A copy of the Inspection and Maintenance Plan is enclosed.

23 Inspection and Maintenance Policy

23.1 *Introduction*

The Basin Inspection and Maintenance Policy establishes minimum standards and requirements for conducting scheduled in house inspections and maintenance. .

23.2 *Scope*

The Basin Inspection and Maintenance Policy shall be followed by all Basin employees.

23.3 *Purpose*

The requirements in the Basin Inspection and Maintenance Policy will aid in ensuring the continued effective operation of the leak detection systems, berms and levees to so as to operate the plant in compliance with applicable statutes and rules and protecting fresh water, public health, safety or the environment.

23.4 *Required Forms*

Inspection and Maintenance Form

23.5 *Policy*

23.5.1 Leak Detection System and Sumps

i. Inspection of leak detection sumps shall be conducted monthly
ii. If fluid is present, a sample shall be collected and analyzed.
iii. Results of the analyses of shall be furnished to the EMNRD/OCD
iv. The following records shall be maintained:
    a. inspection dates
    b. the inspector
    c. leak detection system's status;

23.5.2 Berms and Outside Walls of Pond Levees

i. Inspection of the berms and the outside walls of pond levees shall be conducted quarterly
ii. Inspection shall also be conducted after a major rainfall or windstorm
iii. The berms/levees shall be maintained in such a manner as to prevent erosion.
iv. The following records shall be maintained:
    a. inspection dates
    b. the inspector
    c. condition and maintenance performed;

8. 19.15.36.8C(8)

A copy of the hydrogen sulfide prevention and contingency plan is attached.

16 H_2S Policy

16.1 *Introduction*
Basin H_2S Policy was developed to control potential exposures to H_2S.

16.2 Scope
The Basin H_2S policy applies to any Basin Employee who has potential to be exposed to H_2S.

16.3 *Purpose*
The Basin H_2S policy enhances awareness and establishes measures to protect Basin Employees from occupational exposure to H_2S while still allowing Basin Employees to perform their duties.

16.4 *Required Forms*
None

16.5 *Policy*
i. All Basin Employees shall receive H_2S training and certification during yearly H_2S training sessions. New employees will be sent to a certified school for training.

ii. All Basin Employees who could potentially be exposed to H_2S shall know where the SCBA, rescue apparatus and monitors are located.

iii. All incoming loads shall be tested for hydrogen sulfide concentrations. **Any loads with measurable H_2S concentrations will be treated in a closed system. The treatment reaction will be driven to completion to eliminate all measurable H_2S prior to disposal into the pond.**

iv. Daily tests will be conducted and records made of the pH in the pond. **If the pH falls below 6-7.0 remedial steps will be taken immediately to raise the pH to 6-7.0.** Remedial steps can include the use of caustic agents such as Sodium Hydroxide.

v. The aeration system will be operated to provide sufficient oxygen to the pond to maintain a residual concentration of 0.5 PPM one foot off the bottom of the pond. Tests will be conducted and records made to determine the dissolved oxygen levels in the pond according to the following procedure.

vi. Tests will be conducted at the beginning of each day, or at least once per 24 hour period.

vii. The sample for each test will be taken one foot from the bottom of the pond.

viii. The location of each test will vary around the pond.

ix. **If any test shows a dissolved residual oxygen level of less than 0.5 PPM, immediate steps will be undertaken to oxygenated the pond and create a residual oxygen level to at least 0.5 PPM**. Remedial measures may include adding chemicals or increased aeration.

x. Four stationary continuous H_{2S} monitors will be maintained at each side of the pond. These will be certified on a monthly basis.

xi. *If an H_2S reading of **10 PPM or greater** is obtained:*

a. The dissolved oxygen and dissolved sulfide levels of the pond shall be tested immediately and the need for immediate treatment determined.

b. Tests for H_2S levels will be made at the fence line, downwind from the pond using the hand held monitor

xii. If **two consecutive hourly H_2S readings of 10 PPM** or greater are obtained:

c. Basin Employees will notify the OCD Aztec Office immediately by calling 334-6178

d. Basin Employees will will obtain analysis of dissolved sulfides in the pond.

xiii. If an H_2S reading of **20.0 PPM or greater <u>at the facility fence</u>** is obtained:

e. The operator shall immediately notify:

- OCD, Aztec Office 334.6178 ext. 15
- General Manager, Home 327-1061
- General Manager, Cell 320-2840
- Plant Manager, Cell 486-3078
- State Police 911
- Bloomfield Police 911
- County Sheriff 911
- Fire Department 911

f. Basin Employees and/or Managers will initiate notification of all persons residing within one-half mile of the fence lined and public safety officials with evacuation as requested.

xiv. At least 1000 gallons of a treatment chemical will be stored on site and will not be retained for a period in excess of the manufacturers shelf life. Expired chemical may be disposed of in the pond.

9. 19.15.36.8C(9)

A copy of the closure and post-closure plan is attached.

2. Closure and Post Closure Plan

2.1 *Purpose/Scope*

The purpose of the Closure and Post Closure Section of the Basin Disposal EMS Policy Guidance Document is to define the procedure for identifying the process for closing the facility in a manner that will protect fresh water, public health, safety and the environment pursuant to EMNRD/OCD requirements.

2.2 Key Responsibilities

i. Senior Management: Provides the necessary support, commitment, and resources to develop a closure and post closure plan.

ii. General Manager: Responsible for the preparation of closure and post closure plan, including a responsible third party contractor's cost estimate, sufficient to close the surface waste management facility in a manner that will protect fresh water, public health, safety and the environment.

iii. Plant Manager: Alerts the General Manager when there are changes in Basin Disposal activities that could impact or effect the closure or post closure plan.

2.3 Policy

2.3.1 Financial Assurance Requirements

i. Upon notification by the EMNRD/OCD, Basin shall submit acceptable financial assurance in the amount of Basin's estimated closure and post closure cost, or $25,000, whichever is greater.

ii. Basin shall notify the division of material changes affecting the financial assurance within 30 days of discovery of such change.

iii. The following forms of financial assurance are shall be used

1) Surety bonds.
2) Letters of credit.
3) Cash accounts.

2.3.2 Closure and Post Closure

i. Basin shall ensure that:

1) liquids in the ponds or pits are removed and disposed of in a EMNRD/OCD approved surface waste management facility;
2) liners are disposed of in a EMNRD/OCD approved surface waste management facility;
3) equipment associated with the surface waste management facility is removed;
4) the site is sampled
    a. using chapter nine of EPA publication SW-846,
    b. for paraments listed in Subsections A and B of 20.69.2.3103 NMAC
    c. in accordance with approved gridded plat of the site containing at least four equal sections
    d. sample results are submitted to the environmental bureau in the division's Santa Fe office.

10. 19.15.36.8C(10)

A copy of the contingency plan is attached.

24 Contingency plan

24.1 *Introduction*

The Basin Contingency Plan Policy was designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water in accordance with Paragraph N of 19.15.36.13 NMAC. A copy of this plan shall be provided to the EMNRD/OCD Environmental Bureau.

24.2 Scope

The Basin Contingency Plan Policy applies to any Basin Employee who has potential to be involved in an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water. Basin employees shall carry out the plan's provisions immediately whenever there is a fire, explosion or release of contaminants or oil field waste constituents that could threaten fresh water, public health, safety or the environment; provided that the emergency coordinator may deviate from the plan as necessary in an emergency situation.

24.3 *Purpose*

The Basin Contingency Plan Policy minimizes hazards to fresh water, public health, safety or the environment based on the three possible scenarios of:

i. Slow chronic leaking water from pond
ii. Abrupt catastrophic release from pond
iii. Fire at oil treating or storage tanks.

24.4 *Required Forms*

None

24.5 *Policy*

24.5.1 General Information

i. Emergency coordinator(s):

		Primary
Name	John Volkerding	Jimmy Barnes
Address:	4105 Skyline, Farmington, NM 87401	
Office Phone:	505-334-3013	505-632-8936
Home Phone:	505-327-1061	
Mobile Phone:	505-320-2840	505-486-3078

ii. Emergency equipment:

Equipment	Description	Capabilities

Fire Extinguishers	• **ABC** - This is the multipurpose dry chemical extinguisher. The ABC type is filled with monoammonium phosphate	• combustible materials such as paper, wood, cardboard, and most plastics • flammable or combustible liquids such as gasoline, kerosene, grease and oil • electrical equipment, such as appliances, wiring, circuit breakers and outlets.
Oil Booms	• 100' & 50' sections • Vinyl coated polyester or nylon - ultraviolet resistant • Lead weights provide ballast • 18" width - 6" above water - 12" submerged	• Contains oil & debris
Front End Loader	• 755C Crawler Loader	
Bobcat	• 553 Skid Steer Loader	

iii. Copies of the plan will be maintained at :

Location	Address	Phone
Basin Disposal	200 Montana, Bloomfield, NM	505-632-8936
San Juan County Fire	209 South Oliver Drive, Aztec, NM	505-334-1180
San Juan County Sheriff	211 S. Oliver St, Aztec, NM	(505) 334-6107
San Juan County Emergency Response	209 South Oliver Drive, Aztec, NM	505-334-1180
San Juan Regional Medical Center	801 West Maple,Farmington, NM	505-325-5011

iv. Amendments to Plan:

The contingency plan shall be amended within five working days whenever:

a. Basin's permit is revised or modified;

b. this plan fails in an emergency;

c. Basin changes design, construction, operation, maintenance or other circumstances in a way that increases the potential for fires, explosions or releases of oil field waste constituents that could threaten fresh water, public health, safety or the environment or change the response necessary in an emergency;
d. the list of emergency coordinators or contact information changes
e. the list of emergency equipment changes
f. the emergency coordinator may amend the plan during an emergency as necessary to protect fresh water, public health, safety or the environment.

v. Activation of Plan

The emergency coordinator, will immediately;

a. activate internal surface waste management facility alarms or communication systems, where applicable, to notify surface waste management facility personnel; and
b. notify appropriate state and local agencies with designated response roles if their assistance is needed;

24.5.2 Slow Chronic Leaking from Pond

i. Actions during the Emergency

a. Emergency coordinator will restrict the receipt of water into the plant in order to lower the pond level.
b. Emergency coordinator may utilize additional water trucks to remove water from the pond for disposal at other OCD approved facilities in order to lower the pond level.
c. If Basin has an additional pond, water will be pumped from the leaking pond to the intact pond.
d. If the leak is determined to be in the side of the pond, once the water is below the source of the leak, the liner will be repaired.
e. If the leak is determined to be in the bottom of the pond, all of the water shall be removed and the liner repaired or a new liner introduced.
f. Analysis of the water will be conducted to determine the concentration of constituents of concern.
g. The volume released will be determined and combined with the water analysis from 24.5.2.i.e, the amount of each constituent released will be calculated.
h. Appropriate soil remediation will be performed based on the results of the calculation in 24.5.2.i.f. to clean the environment and recover any oil field waste.
i. An evacuation plan is not required for this event.

24.5.3 Abrupt Catastrophic Release from Pond

i. Actions during the Emergency

a. Emergency coordinator will immediately assign someone to contact the Emergency contacts (Sheriff, San Juan County, EMNRD/OCD, EPA)
b. The oil booms will be used downstream to minimize the spread of the water.
c. The front end loader and bobcat will be used to create berms and trenches to minimize the spread of water.
d. The front end loader will be used to repair the levee.
e. Analysis of the water will be conducted to determine the concentration of constituents of concern.
f. The volume released will be determined and combined with the water analysis from 24.5.2.i.e, the amount of each constituent released will be calculated.
g. Appropriate soil remediation will be performed based on the results of the calculation in 24.5.2.i.f to clean the environment and recover any oil field waste.
h. Soil samples will be taken and analyzed along the path of the water and compared to soil analysis of neighboring soil not impacted by the water to determine if additional soil remediation is necessary.
i. Appropriate soil remediation will be performed based on the results of the samples in 24.5.2.i.h to clean the environment and recover any oil field waste.
j. An evacuation plan is not required for this event.

24.5.4 Fire at Oil Treating or Storage Tanks

i. Actions during the Emergency

a. Emergency coordinator will immediately contact San Juan County Fire Department.
b. Non-critical personnel will evacuate using Montana Blvd.
c. Critical personnel will use the front end loader and bobcat to create berms and trenches to minimize the spread of oil.
d. If the fire is at the storage tanks, the oil flow will be such as to enter the pond and/or into the depression directly to the north to minimize the extent of the oil spread.
e. If the fire is at the treating tanks, the oil flow will be such as to enter the depression directly to the west to minimize the extent of the oil spread.
f. After the fire is contained, soil samples will be taken and analyzed along the path of the water and compared to soil analysis of neighboring soil not impacted by the oil to determine if the extent of soil remediation necessary.

g. Appropriate soil remediation will be performed based on the results of the samples in 24.5.2.i.f to clean the environment and recover any oil field waste.

11. 19.15.36.8C(11)

A plan to divert water from around the ponds is shown on the pond drawings as discussed under item number 5.

12. 19.15.36.8C(12)

Not applicable.

13. 19.15.36.8C(13)

Not applicable.

14. 19.15.36.8C(14)

Copies of the environmental training procedure, migratory bird protection policy and spill prevention control and counter measure policy are attached.

5 Environmental Training Procedure

5.1 Purpose/Scope

The purpose of the Environmental Training Procedure Section of the Basin Disposal EMS Policy Guidance Document is to describe the Basin Disposal process of identifying training requirements, delivering training commensurate with defined responsibilities, and maintaining training records.

5.2 Key Responsibilities

i. General Manager: Develops the training matrix that includes required environmental training. Make changes as needed to keep the training current with customer requirements and/or legal requirements.
ii. Plant Manager: Schedule appropriate training sessions for company personnel. Provide make-up training as needed.
iii. Employees: Review list of required training for their positions and ensure training is obtained and recorded.

5.3 Policy

i. Identify Required Training:
The General Manager identifies required environmental training using the Basin Disposal Compliance Matrix. The following environmental training is provided to all affected Basin Disposal employees:

- Legally required training, for example, 19.15.36.13 (P);
- Basin Disposal EMS Requirements;
- Elements of Basin Disposal HSE Policy and Procedure Requirements;
- Elements of customer-specific HSE policies and procedures when applicable;
- Employee roles and responsibilities for compliance with legal requirements;
- Applicable standard operating procedures and controls; and
- Requirements and procedure for reporting of all noncompliance issues

ii. Providing Required Training and Ensuring Competency:
The General Manager, after consultation with Basin Disposal Senior Management, schedules training to be performed on an annual basis at a minimum. Competence of employees is evaluated using tests at the end of the training sessions and on-site performance reviews by General Manager and/or Plant Manager. Records of all training sessions are maintained, including rosters of each training class for a minimum of 5 years.

5. 4 Procedure

i. Identify required environmental training using the compliance matrix, industry standards, and selected company personnel.
ii. Develop a training matrix that includes a minimum of:

- Legally required training;
- Basin Disposal EMS Requirements;
- Elements of Basin Disposal HSE Policy and Procedure Requirements;
- Elements of customer-specific HSE policies and procedures when applicable;
- Employee roles and responsibilities for compliance with legal requirements;
- Applicable standard operating procedures and controls; and
- Requirements and procedure for reporting of all noncompliance issues

iii. Schedule training and provide a annual training calendar for employees.
iv. Ensure competency of employees by evaluating tests taken after specific training is completed, using performance measures, using environmental assessments and audits.
v. Maintain records of training including class rosters.

5.5 Key Documents/Tools/References

i. Basin Disposal HSE Policy Manual
ii. Training Records

Migratory Bird Protection Policy

22.1 *Introduction*

The Basin Disposal Migratory Bird Protection Policy was developed to ensure continuous protection of migratory birds and to operate the facility in a manner that is not hazardous to migratory birds.

22.2 Scope

The Basin Disposal Migratory Bird Protection Policy applies to all Basin Employees.

22.3 *Purpose*

The Basin Disposal Migratory Bird Protection Policy enhances awareness and establishes measures to ensure plant operations are continually protective of migratory birds.

22.4 *Required Forms*

None

22.5 *Policy*

i. Basin Disposal is manned by at least two employees 24 hours per day, 7 days per week, 52 week per year.

ii. The shop is situated in a manner with a full view of the pond and Basin Disposal employees shall be aware of any bird near the pond.

iii. Basin Disposal Assistant Managers and/or Plant Manager shall make hourly inspection rounds of the plant including noting any bird activity near the pond.

iv. In the unlikely event a bird lands on the pond, Basin Disposal employees shall immediately utilize the boat and side ropes to retrieve the bird.

v. The bird shall be transported to the shop and either transported to a local veterinary clinic or if only lightly dirtied the oil may removed by Basin personnel using procedures adapted from those of the International Bird Rescue Research Center:

   a. The bird's entire body is immersed in a one percent solution of Dawn and warm water (warm enough to approximate the bird's internal body temperature. Once wet, the bird is unable to thermo regulate) by one person while a second vigorously agitates the water into the bird's feathers.
   b. A WaterPik filled with the same solution is used to clean the head.
   c. A soft toothbrush and cotton swabs are used to loosen dried oil around the head and eye area.
   d. When the water becomes dirty, the bird is moved to a second pan. The washing process is repeated as often as necessary.
   e. The bird is considered clean when the tub of water is clear and free of oil.
   f. The bird is moved to another pan of clean warm water for rinsing.
   g. A WaterPik filled with the Warm water is used to clean the head.
   h. When the water becomes soapy, the bird is moved to a second pan. The rinsing process is repeated as often as.
   i. The bird is considered rinsed when no soap is visible in a fresh pan of

water.

j. After wash and rinse, the cleaned bird is placed in a protective net-bottomed pen. As it rests, the bird will begin to preen its own feathers back into place. The complete realignment of feathers in a tight overlapping pattern creates a waterproof seal.
k. The bird is fed a nutritious food mixture to assure proper nourishment, plenty of fluids, as well as vitamins and medications, and is allowed free access to food.
l. The bird is released when it is stable, healthy, and completed preening. The bird shall be taken to a local veterinary clinic for examination prior to release.

Spill Prevention Control and Countermeasure (SPCC) Policy

20.1 ***Introduction***

The SPCC program is administered by the United States Environmental Protection Agency under the authority of the Clean Water Act and the Oil Pollution Prevention Act 40 CFR 112. The federal program establishes procedures, methods, equipment and other requirements to prevent the discharge of oil from non-transportation related onshore (and offshore) facilities into the "navigable waters" of the United States.

20.2 ***Scope***

Basin believes SPCC regulations apply to the Basin Disposal Plant in that a release from the Basin Disposal Plant could reasonably be expected to discharge oil into "navigable waters" of the United States and Basin maintains an oil storage capacity greater than an amount specified by laws. At the time of writing this policy, the application of SPCC regulations to the Basin Disposal Plant, and Basin Employees, is dependent upon EPA regulators' interpretation of "navigable waters". Per Paragraph K of 19.15.36.13 NMAC Basin Disposal shall comply with the spill reporting and corrective action provisions of 19.15.1.19 or 19.15.3.116 NMAC.

20.3 ***Purpose***

The purpose of the Basin SPCC Policy's purpose is to prevent potential environmental damage from any and all discharges of oil into the environment from the Basin Disposal Plant or by a Basin Employee and comply with all reporting and corrective action requirements.

20.4 ***Required Forms***

Any reportable spills or discharges of oil shall be reported to appropriate regulatory authorities in accordance with applicable local, state and federal laws, rules and regulations on the forms, and in a manner, required by those laws, rules and regulations, to include but not limited to: EMNRD/OCD Form C-141.

20.5 Definitions

20.5.1 Release shall mean all breaks, leaks, spills, releases, fires or blowouts involving crude oil, produced water, condensate, drilling fluids, completion fluids or other chemical or contaminant or mixture thereof, including oil field wastes and natural gases to the environment.

20.5.2 A Major Release

- an unauthorized release of a volume in excess of 25 barrels;
- an unauthorized release of any volume which
    - results in a fire
    - will reach a water course
    - may with reasonable probability endanger public health
    - cause substantial damage to property or the environment;
- a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in Section 19, Subsection B of ,

20.5.3 A Minor Release

- an unauthorized release of a volume in excess of between 5 and 25 barrels;

20.6 Policy

20.6.1 Duties and Plan requirements

i. The General Manager, or designee, shall develop and implement a SPCC Plan as required by the SPCC Program. The plan must include a written description of the Basin Disposal Plant's compliance with SPCC requirements designed to prevent oil releases into navigable waters.

ii. The General Manager, or designee, shall ensure all equipment used to transport and store oil is sized to accommodate any expected volumes of oil. Additionally, the equipment must meet general engineering design practices such as using welded steel tanks to store oil.

iii. The General Manager, or designee, must ensure the Basin Disposal Plant's design includes spill containment and/or diversionary structures (e.g., earthen berms or containment curbing around tanks or other equipment) that are designed to prevent oil from reaching "navigable waters". These prevention measures must be built to contain the storage capacity of the largest single tank and to allow sufficient freeboard for any rain or snow. Any containment berm drain line must have a valve that is normally locked in the closed position. Other containment structures such as retaining walls, curbing, culverts and gutters, and retention areas can be used. If adequate containment is not practical, the SPCC Plan must include a strong oil spill contingency plan and a written commitment of manpower, equipment and resources to expeditiously respond to a spill.

iv. The General Manager, or designee, must periodically instruct personnel in the operation and maintenance of equipment to prevent oil discharges and to ensure compliance with pollution control laws and regulations.

v. The General Manager, or designee, must review, evaluate and update (if necessary) the Basin SPCC Plan every five years, and s/he ensure copies of the Basin SPCC Plan, inspection and training records are maintained at the Basin Disposal Plant (inspection and training must be maintained for five years).

20.6.2 Basin employee requirements

i. No Basin Employees shall intentionally cause any spill of any oil, oil related or chemical materials at the Basin Disposal Plant.

ii. Basin Employees shall be knowledgeable and have understanding of the operation and maintenance of Basin equipment and storage apparatuses to prevent oil discharges. Basin Employees shall be knowledgeable and have understanding of applicable pollution laws, rules and regulations.

iii. Basin Employees working at the Basin Disposal Plant shall ensure that the risk of discharge or spill of oil, and oil-related products, reaching "navigable waters" is minimized.

iv. Basin Employees working at the Basin Disposal Plant or on, or around, any

undiked areas (e.g., pumps, tanks, cellar and pits) shall ensure a ditch or berm leading to secondary containment or reserve pit controls the area.

v. Basin Employees working at the Basin Disposal Plant shall make every effort to prevent any petroleum products from leaving the primary containment and from reaching "navigable waters", especially in areas or periods of heavy rain or flood.

20.6.3 In the event of a spill

i. In the event of a spill, Basin Employees working at the Basin Disposal Plant shall attempt to contain the spill by building a secondary basin or a diversionary structure; whichever is appropriate at the time. Spills shall be reported to the Plant Manager. Plant Managers shall notify the General Manager. The General Manager shall request that the owner, or their authorized representative, provide such equipment as is necessary to build structures to contain the spill.

ii. Basin Employees working at the Basin Disposal Plant shall make every effort to ensure all third party equipment used to transport and store oil is sized to accommodate any expected volumes of oil.

20.6.4 In the event of a Minor Release

i. In the event of a Minor Release, Basin Employees working at the Basin Disposal Plant shall attempt to contain the release by building a secondary basin or a diversionary structure; whichever is appropriate at the time. Minor Releases shall be reported to the Plant Manager. Plant Managers shall notify the General Manager. The General Manager shall request that the owner, or their authorized representative, provide such equipment as is necessary to build structures to contain the spill.

ii. Basin Employees working at the Basin Disposal Plant shall make every effort to ensure all third party equipment used to transport and store oil is sized to accommodate any expected volumes of oil.

iii. The General Manager shall submit notification to the EMNRD/OCD as follows:
   - timely written notice = within fifteen days to district office on C-141
   - timely written notice = within fifteen days to Bureau Chief on C-141

v. The General Manager shall submit notification to other regulatory entities as required.:

20.6.5 In the event of a Major Release

i. In the event of a Major Release, Basin Employees working at the Basin Disposal Plant shall attempt to contain the release by building a secondary basin or a diversionary structure; whichever is appropriate at the time. Minor Releases shall be reported to the Plant Manager. Plant Managers shall notify the General Manager. The General Manager shall request that the owner, or their authorized representative, provide such equipment as is necessary to build structures to contain the spill.

ii. Basin Employees working at the Basin Disposal Plant shall make every effort to ensure all third party equipment used to transport and store oil is sized to accommodate any expected volumes of oil.

iii. The General Manager shall also submit notification the EMNRD/OCD as follows:

- immediate verbal notice = within 24 hours to district office
- immediate verbal notice = within 24 hours to Bureau Chief
- timely written notice = within fifteen days to district office on C-141
- timely written notice = within fifteen days to Bureau Chief on C-141

vi. The General Manager shall submit notification to other regulatory entities as required.

20.6.6 Corrective Action

i. Basin shall complete EMNRD/OCD approved corrective action for releases which endanger public health or the environment.

ii. Releases will be addressed in accordance with a(n) :

a. remediation plan submitted to and approved by EMNRD/OCD or

b. abatement plan submitted in accordance with Section 19 of 19.15.1 NMAC.

15. 19.15.36.8C(15)

A map showing the existing water course features and water wells is shown under item number 2.

16. 19.15.36.8C(15B & C)

Not applicable.

17. 19.15.36.8C(15D)

We are enclosing information of the soil types below this existing facility.

The Basin Disposal property consists of two types of soils within the 30-acre facility. A majority of the property is composed of Gy-Gypsiorthids-Badland-Stumble complex, moderately steep, and Sw-Stumble-Fruitland Association, gently sloping. These soils are as identified in the Soils Survey of San Juan County, New Mexico, Eastern Part, as prepared by the Soil Conservation Service dated 1977.

Principal characteristics of the Gy series include a slow to rapid permeability rate, runoff is slow to medium and the hazard of water erosion is slight to moderate. The Stumble soil is formed in alluvium derived dominantly from sandstone and shale and has a classification of Soils A in the hydrologic group. Typically, the high water table is greater than 6' in depth and bedrock is in excess of 5'. Many of the same characteristics are true of the SW soil including permeability as being rapid, runoff is very slow, and the soil is formed in alluvium derived dominantly from sandstone and shale. The SW soil is also classified as a Soil A in the hydrologic group and again, exhibits basically the same depths for high water and depth to bedrock.

18. 19.15.36.8C(15E, F & G)

Not applicable.

19. 19.15.36.8C(16)

A copy of the Application for Waste Management Facility is attached.

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

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

Form C-137
Revised June 10, 2003

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

☒ Commercial ☐ Centralized

1. Type: ☐ Evaporation ☒ Injection ☐ Other
   ☐ Solids/Landfarm ☐ Treating Plant
2. Operator: BASIN DISPOSAL, INC.
   Address: PO BOX 100, AZTEC, NM 87410 (MAILING)
   100 MONTANA AVE., BLOOMFIELD, NM (PHYSICAL)
   Contact Person: JOHN VOLKERDING Phone: 505-334-3013
3. Location: SE /4 NW /4 Section 3 Township 29N Range 11W
   Submit large scale topographic map showing exact location
4. Is this a modification of an existing facility? ☒ Yes ☐ No
5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.
6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and land farm facilities.
8. Attach a contingency plan for reporting and clean-up for spills or releases.
9. Attach a routine inspection and maintenance plan to ensure permit compliance.
10. Attach a closure plan.
11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.
12. Attach proof that the notice requirements of OCD Rule 711 have been met.
13. Attach a contingency plan in the event of a release of H_2S.
14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.
15. CERTIFICATION
    I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: _____ Title: _____

Signature: _____ Date: _____

E-mail Address:

_____

20. 19.15.36.8C(17)

A copy of the Storm Water Pollution Prevention Plan for Basin Disposal.

Table of Contents

1.0 INTRODUCTION

This Storm water Pollution Prevention Plan (SWPPP) for Basin Disposal covers the disturbance of 18 acres for Produced Water Disposal. This SWPPP has been developed to address the activities that will take place on an ongoing basis. A Notice of Intent (NOI) has not been filed with the U.S. Environmental Protection Agency (EPA). Basin Disposal is considered grandfathered under SWPPP.

This Plan identifies Best Management Practices (BMPs) which will be implemented to meet the terms and conditions of the EPA's Phase in storm water Regulations of the NPDES program (effective March 10, 2005). According to these Phase in requirements, construction projects disturbing greater than 1.0 acre require application for coverage under the National Construction General Permit (CGP).

To add site-specific information to this SWPPP, an amendment that describes the site and addresses site-specific project requirements is required. The amendment will be inserted into the SWPPP on a *Project Specific Data Sheet* before ground disturbing activities on any additional activities.

2.0 BACKGROUND

The site is on previously cleared land. Limited vegetative growth is occurring. In accordance with this SWPPP, inspections and monitoring are conducted according to the requirements of CGP and tracked in an *Inspection and Monitoring Log Book*

This SWPPP has been prepared in accordance with good engineering, hydrologic, and pollution control practices, and is designed to constitute compliance with Best Available Technology (BAT) and Best Conventional Technology (BCT), as mandated under the Federal Clean Water Act and the Federal Water Pollution Control Act, as well as rules and regulations promulgated by the EPA.

3.0 ENVIRONMENT AL OVERVIEW

The following sections provide a brief overview of the location, physical, and biological environments within the boundaries of the facility.

The project is located in Section 3 Township 29 North, Range 11 West New Mexico Principle Meridian, San Juan County, New Mexico.

The SWPPP coverage area is shown on the project area maps located in Figure 1

The project land is located within the northwest portion of San Juan County, approximately 5 miles south of Aztec, New Mexico off Highway 550. The approximate elevation ranges from 5,320 to 5,550 feet above mean sea level. Land features are characterized by mesa tops and canyons with aspect slopes ranging from approximately 0 to 5 degrees. The drainage slopes to the east then south.

The San Juan River is located approximately 5.0 miles south of site. There are no wetlands or springs located within the project area.

The project area is located in the San Juan Basin, which has a semi-arid continental climate. Large variations in temperature, both diurnal and seasonal, are common. Average snowfall can range from one to twelve inches per year. However, during the drought that has encompassed the San Juan Basin for the past five years the primary precipitation falls as rain from mid July through mid September.

This site is on private land. There are no threatened, endangered or sensitive species within the site boundaries.

No cultural resources exist on this site.

4.0 GENERAL SITE INFORMATION

4.1 Owner Name and Address

Basin Disposal Inc.
200 Montana
Bloomfield, NM 87413

Jerry Sandel
Phone: (505) 334-3194

4.2 Facility Contacts and Telephone Numbers

Basin Disposal Inc.
200 Montana
Bloomfield, NM 87413
Attn: Keith Johnson

Phone: (505) 632-8936

4.3 Project Specific Data Sheet

Each project will have a *Project Specific Inspection Sheet* completed and added to Appendix B. A sample *Project Specific Data Sheet* is provided as Figure 2. Information that must be included for each site includes:

A description of the construction activity.

If it differs from the description herein, the proposed sequence for major activities.

Estimates of the total area of the site, and the area of the site that is expected to undergo clearing, excavation or grading.

If it differs from the description herein, an estimate of the runoff coefficient of the site before and after construction activities are completed and any existing data describing the soil, soil erosion potential, or the quality of any discharge from the site.

A description of the existing vegetation at the site and an estimate of the percent vegetative ground cover.

The location and description of any other potential pollution sources, such as vehicle fueling, etc.

If it differs from the description herein, the location and description of any anticipated non-storm water components of the discharge, such as springs and irrigation return flows.

The name of the receiving water(s) and the size, type and location of any outfall into the *receiving water(s).*

A construction site map must be attached.

4.4 Construction Site Maps

A map of the area surrounding the planned construction activity is inserted into this SWPPP as part of the *Project Specific Data Sheet in Appendix A.* The site map will show the construction activity in relation to surrounding topographic features.

At a minimum, the site map will include:

Site boundaries,
All areas of soil disturbance,
Areas of cuts and fills,
Location of erosion control facilities or structures.

Figure 1 -Facility Specific Data Sheet

Facility Specific Data Sheet

1. **Facility Name**

2. **Project Location** (List Township, Range, Section, Elevation and Federal Lease Number)

3. **Project Description** (Describe specific project components including acreage and any permits submitted)

4. ***Estimated Total Area of the Site to Undergo Clearing, Excavation, or Grading*** (List each project component's acreage).

5. **Existing Soil Data and Estimated Runoff Coefficient Before and After Construction.**

6. ***Description of Existing Vegetation and Estimate of Percent of Ground Cover***

7. **Description of Potential Pollution Sources.**

8. **Description of Anticipated Non-stormwater Discharges.**

9. **Name of Receiving Water and Type of Outfalls**

10. **Key Project Dates**

Date NOI submitted to EPA

11. **Inspection/Monitoring**

Refer to *Inspection and Monitoring Log Book*

12. **Facility-specific BMPs** -Project-specific BMPs, or those required as COA for federal projects are listed on the back of this data sheet.

5.0 BEST MANAGEMENT PRACTICES FOR STORMW ATER POLLUTION PREVENTION

The recommended BMPs to be employed during construction activities are based on EPA Guidance Documents and other engineering practice sources. General BMPs to be implemented are described in the following sections for site-specific erosion and sediment control features.

5.1 Erosion and Sediment Control

5.1.1 Structural Practices and Non-structural/ Stabilization Practices

The following project area pre- and post-construction BMPs are applicable:

Berms

Water Bars

Slope Management

5.2 Stabilization and Long-Term Storm water Management

5.2.1 Reclamation

Storm water management controls are constructed to reduce and prevent or control pollution by sediments entrained in runoff during and after construction is completed. Final site stabilization will be achieved in the following manner.

Contouring and establishing proper slopes;
Constructing proper water bars in accordance with BLM/FFO specifications
Maintaining berms and water bars

In accordance with the NPDES CGP final stabilization is reached when the following has been achieved:

1) All soil disturbing activities at the site have been completed;
2) Uniform vegetation cover has been established with a density of at least 70% of pre disturbance levels, or equivalent permanent physical erosion control methods have been employed. The 70% vegetation cover is defined as having 70% of cover in the adjacent un-disturbed land.

The site surface is completely used by the facility. Revegetation is not practical.

5.3 Other Controls

5.3.1 Materials Handling and Spill Prevention

Any accidental spill will be cleaned up immediately and contaminated soils will be either landfarmed or landfilled in accordance with State and Federal requirements. Where a release of hazardous substance or oil exceeds the reportable quantity established under 40 CFR 110, 40 CFR 117, 01" 40 CFR 302 during a 24-hour period, the operator must:

1.) Notify the National Response Center -800-424-8802 or 202-426-2675; 2.)
Update the Plan within 14 days to address reoccurrences of such releases.

5.3.2 Waste Disposal Practices

The established methods for Handling Waste Material will be followed all activities. The program specifies the following waste management procedures.

Solid Waste –Trash bins are picked up by Transit Waste and hauled to the
Bondad Landfill located in Colorado.
Soils/BS&W-Shipped to approved landfarm

6.0 INSPECTIONS AND MAINTENANCE

6.1 Inspections

Visual inspections will occur once a month and within 48 hours of a major storm event that has the potential to cause surface runoff. Snowfall is not considered to have the potential to cause surface runoff until melting begins. The inspections should identify evidence of sediment entering drainage ways and ensure that all BMPs are functioning properly. Areas to be inspected, at a minimum, include:

- Disturbed areas;
- Erosion and sediment control BMPs
- Locations where vehicles enter or exit the facility
- Slope areas.

Individuals conducting the inspections will be knowledgeable in inspection and maintenance practices necessary for keeping the erosion and sediment controls in good working order.

6.2 Maintenance

Maintenance of erosion and sediment control BMPs will be conducted as defined in 6.1 to ensure that the BMPs are functioning properly.

6.3 Record Keeping

An *Inspection and Monitoring Report Form* will be completed during each site (project) inspection. The completed *Inspection and Monitoring Report Forms* will be maintained in an *Inspection and Monitoring Log Book* along with this SWPPP and will be placed in Appendix D. The *Inspection and Monitoring Report Forms* will be filed and maintained for a 3-year period. After that time, they may be disposed. A copy of this SWPPP and the *Inspection and Monitoring Log Book* will be kept at the Basin Disposal office.

Repairs and maintenance activities should be implemented as soon as practicable after the inspection. This SWPPP must also be revised within 14 days of the inspection, if necessary, to reflect changes to site description/maintenance activities (BMPs).

7.0 COMPLIANCE WITH APPROVED STATE OR LOCAL PLANS

This SWPPP addresses the activities for this facility and is not within the boundaries of any Native American Nation. Any erosion control or stormwater management measures specified in the project approval have been incorporated as BMPs presented in this SWPPP.

8.0 TERMINATION

Operators of a construction site must continue to comply with the SWPPP conditions until: (1) the construction activity is complete, and all disturbed soils have been finally stabilized as described in Section 6.2, and temporary erosion and sediment controls have been or will be removed; or (2) the facility operator changes. When one of these criteria is met, a Notice of Termination (NOT) must be filed with the EP A.

9.0 OWNER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

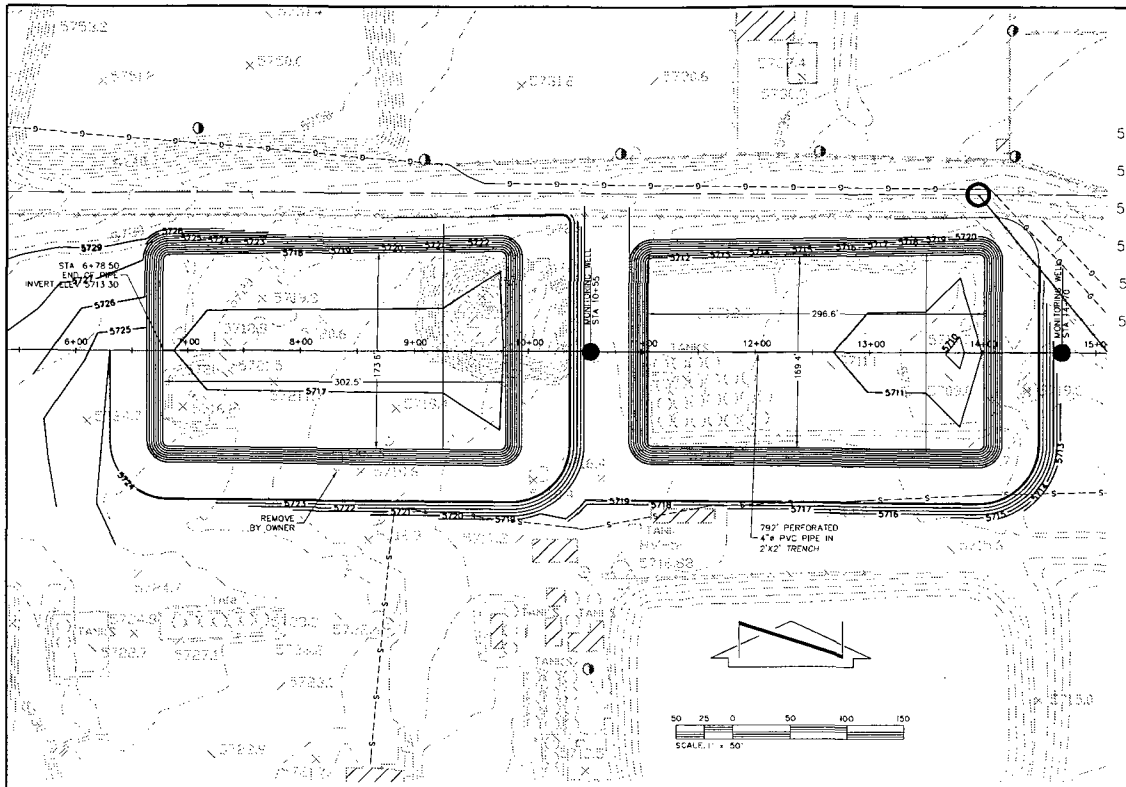
Name and Title (Type or Print):

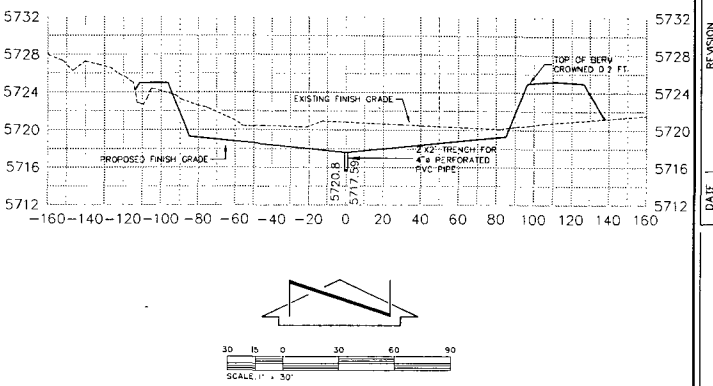
Name Jerry Sandell

Title President

Basin Disposal Inc.
Company

Date 8-1-07





Site Volume Table: Adjusted 15% For Shrinkage

Site	Stratum	Surf1	Surf2	Cut cu.yds	Fill cu.yds	Net cu.yds	Method
07111 BASIN DISPOSAL							
	adjust1	exist	ADJUST1	15496	11685	3812 (C)	Composite

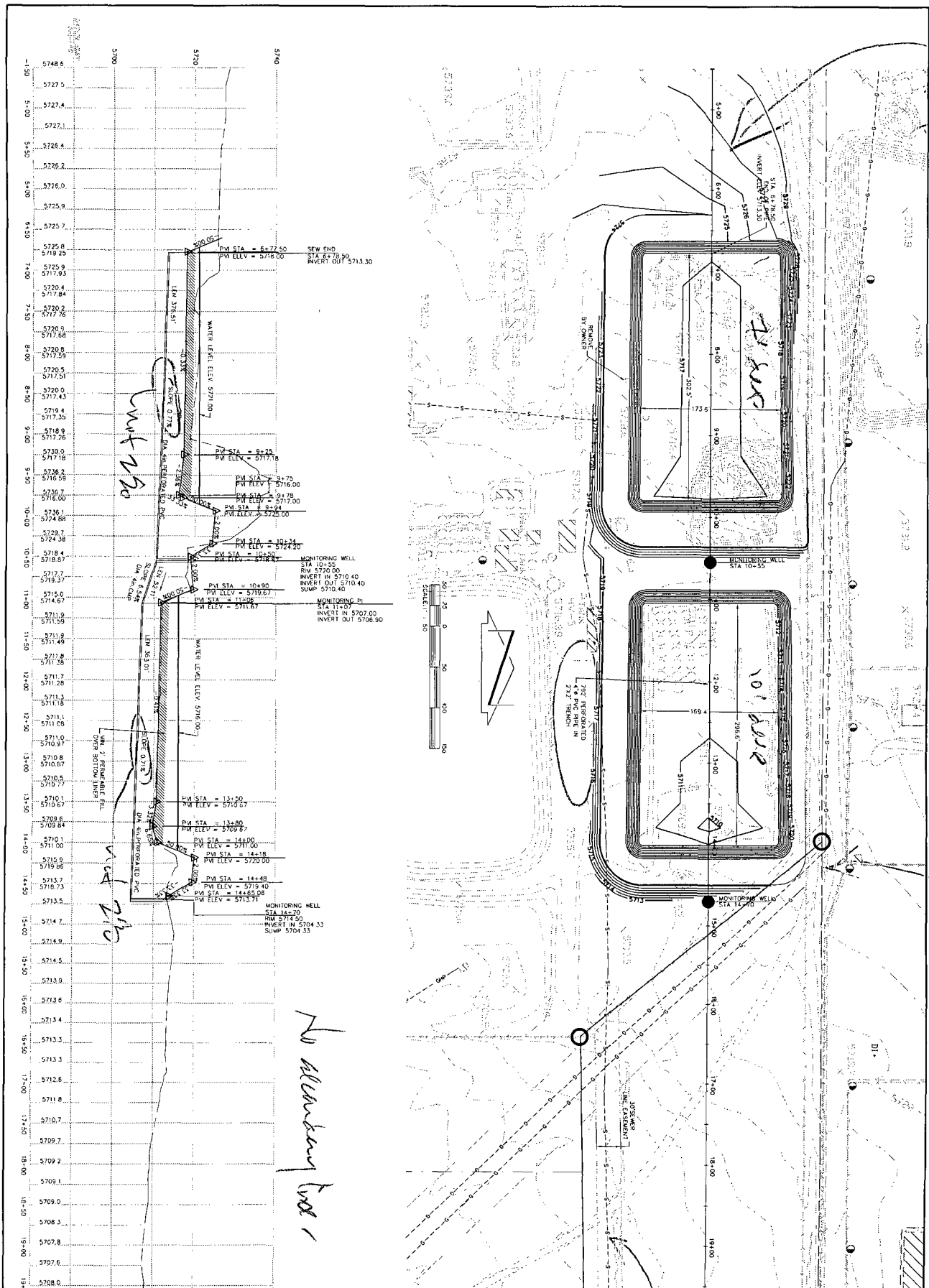
CHENEY·WALTERS·ECHOLS
ENGINEERS · SURVEYORS
909 W. APACHE - FARMINGTON, NEW MEXICO 87401 - (505)327-1303

BY	REVISION	DATE

PRINTED: March 19, 2008
FILE: L:\Karen\LWA\DWG\2007\07111SET.dwg

SITE PLAN
BASIN DISPOSAL
200 MONTANA AVE.
BLOOMFIELD, NEW MEXICO

DATE: 09/07/2007
DRAWN BY: KKN
PROJ. 07111
SCALE: 1" = 50'
FILE: 7111SET
SHEET
2
OF
2



SHEET 1 OF 2 SHEET FILE:7111SET SCALE:1" = 50' PROJ. 07111 DRAWN BY: KKN DATE:09/07/2007	SITE PLAN BASIN DISPOSAL 200 MONTANA AVE. BLOOMFIELD, NEW MEXICO		CHENEY·WALTERS·ECHOLS INC ENGINEERS · SURVEYORS 909 W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303

DATE	REVISION	BY

PRINTED March 19, 2008
FILE: \\Karen\d\KKN-DWG\2007\07111\7111SET.dwg