

AP-2

**Monitoring Well
Plugging Reports**

4/22/13



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805
E-MAIL: cbrunson@bbcinternational.com

April 22, 2013

Jim Griswold
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: Westgate Subdivision/Grimes Battery & Tasker Road (AP-2) in Unit Letter K of Section 28, Township 18 South, Range 38 East NMPM in Hobbs, New Mexico

Dear Mr. Griswold:

In response to your letter of February 12, 2013 to Shell Exploration & Production Company (Shell) closing AP-2 and giving the approval to plug and abandon the eleven remaining monitoring wells, I am pleased to include the following information pertaining to the plugging activities on behalf of Shell.

BBC International, Inc. submitted the request to plug and abandon the eleven monitoring wells to the District II office in Roswell, NM of the Office of the State Engineer of New Mexico on March 11, 2013. The well plugging plan of operations was approved by Catherine Goetz, Water Resource Specialist, of the Office of the State Engineer on March 14, 2013. A copy of the approved plan is included in this report.

The eleven monitoring wells were plugged and abandoned in accordance with the approved plan of operations on March 18th and 19th, 2013. Pictures of the plugged wells are included in this report.

On April 5, 2013, the plugging record forms were submitted to Office of the State Engineer in accordance with 19.27.4 NMAC. Copies of the plugging record forms are included in this report.

With this submission of the well plugging and abandonment plan and records, this meets the last requirement of your closure letter of February 12, 2013 and no further action is required.

Sincerely,

Cliff P. Brunson
President

cc: Geoff Leking, OCD District I Office, Hobbs
Lynn Walker, Shell Exploration & Production Company, Houston



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Scott A. Verhines, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

March 14, 2013

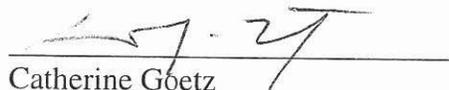
Shell Exploration and Production
200 N. Dairy Ashford
Houston, Texas 77079

RE: *Well Plugging Plan of Operations* for Eleven Monitoring Wells, City of Hobbs, NM

Greetings:

Enclosed are your copies of the approved Well Plugging Plan for the above referenced eleven monitoring wells. The proposed method of operations for the subject wells is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted August 31, 2005 by the State Engineer.

Sincerely,

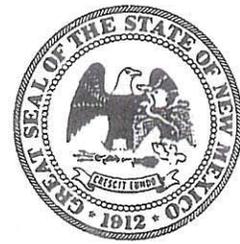

Catherine Goetz
Water Resource Specialist
District II Office of the State Engineer

Enclosures

cc: BBC International



WELL PLUGGING PLAN OF OPERATIONS



NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

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

II. GENERAL / WELL OWNERSHIP:

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: NA

Name of well owner: Shell Exploration & Production Company

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

Phone number: (832) 337-2206 E-mail: lynn.walker@shell.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: John White / White Drilling Co.

New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/14

IV. WELL INFORMATION:

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

STATE ENGINEER

1) GPS Well Location: Latitude: 32 deg, 42 min, 52.8 sec
Longitude: 103 deg, 9 min, 22.3 sec, NAD 83

2) Reason(s) for plugging well: Approval to plug monitoring wells given by the New Mexico Oil Conservation Division in Santa Fe.

3) Was well used for any type of monitoring program? Yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? No If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: 72 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 80 feet

- 7) Inside diameter of innermost casing: 4.026 inches.
- 8) Casing material: Schedule 40 PVC
- 9) The well was constructed with:
 _____ an open-hole production interval, state the open interval: _____
 a well screen or perforated pipe, state the screened interval(s): 10 feet in water, 5 feet above
- 10) What annular interval surrounding the ~~artesian~~ casing of this well is cement-grouted? 50-55 feet
- 11) Was the well built with surface casing? NO If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? _____ If yes, please describe: _____
- 12) Has all pumping equipment and associated piping been removed from the well? Yes If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

- 1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well: pump mix - pump with tremie pipe from bottom to top of well
- 2) Will well head be cut-off below land surface after plugging? Yes

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant.

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface: 52.24 gal.
- 4) Type of Cement proposed: Type 2 Portland cement with 5% quick gel
- 5) Proposed cement grout mix: 6 gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: _____ batch-mixed and delivered to the site
 mixed on site

7) Grout additives requested, and percent by dry weight relative to cement: 5% quick gel

8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Monitor wells were installed at an oilfield remediation site overseen by the New Mexico Oil Conservation Division in Santa Fe. Crude oil had been detected on the water table, but it has been removed and closure and plugging of the monitor wells has been granted by oil conservation Division on February 12, 2013. See attached letter.

VIII. SIGNATURE:

I, Cliff P. Brunson, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Cliff P. Brunson
Signature of Applicant

3/11/13
Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

- Approved subject to the attached conditions.
- Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 14 day of MARCH, 2013

Scott A. Verhines, State Engineer

By: [Signature] for Andy Morley
CATHERINE J. GOETZ

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

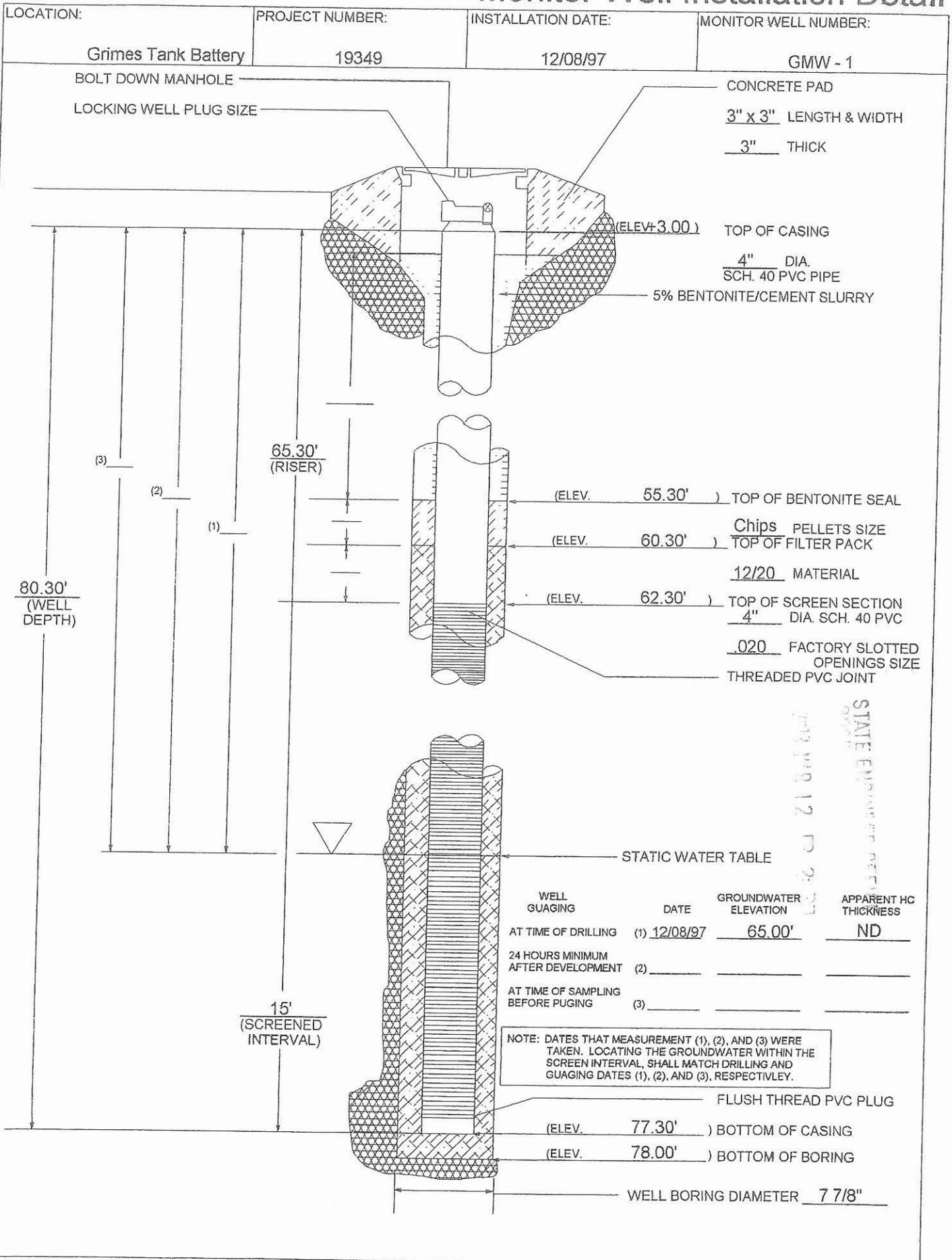
	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			0.0
Bottom of proposed interval of grout placement (ft bgl)			80.0
Theoretical volume of grout required per interval (gallons)			52.24 gal.
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			6 gal
Mixed on-site or batch-mixed and delivered?			on site
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			
Bottom of proposed sealant of grout placement (ft bgl)			
Theoretical volume of sealant required per interval (gallons)			
Proposed abandonment sealant (manufacturer and trade name)			

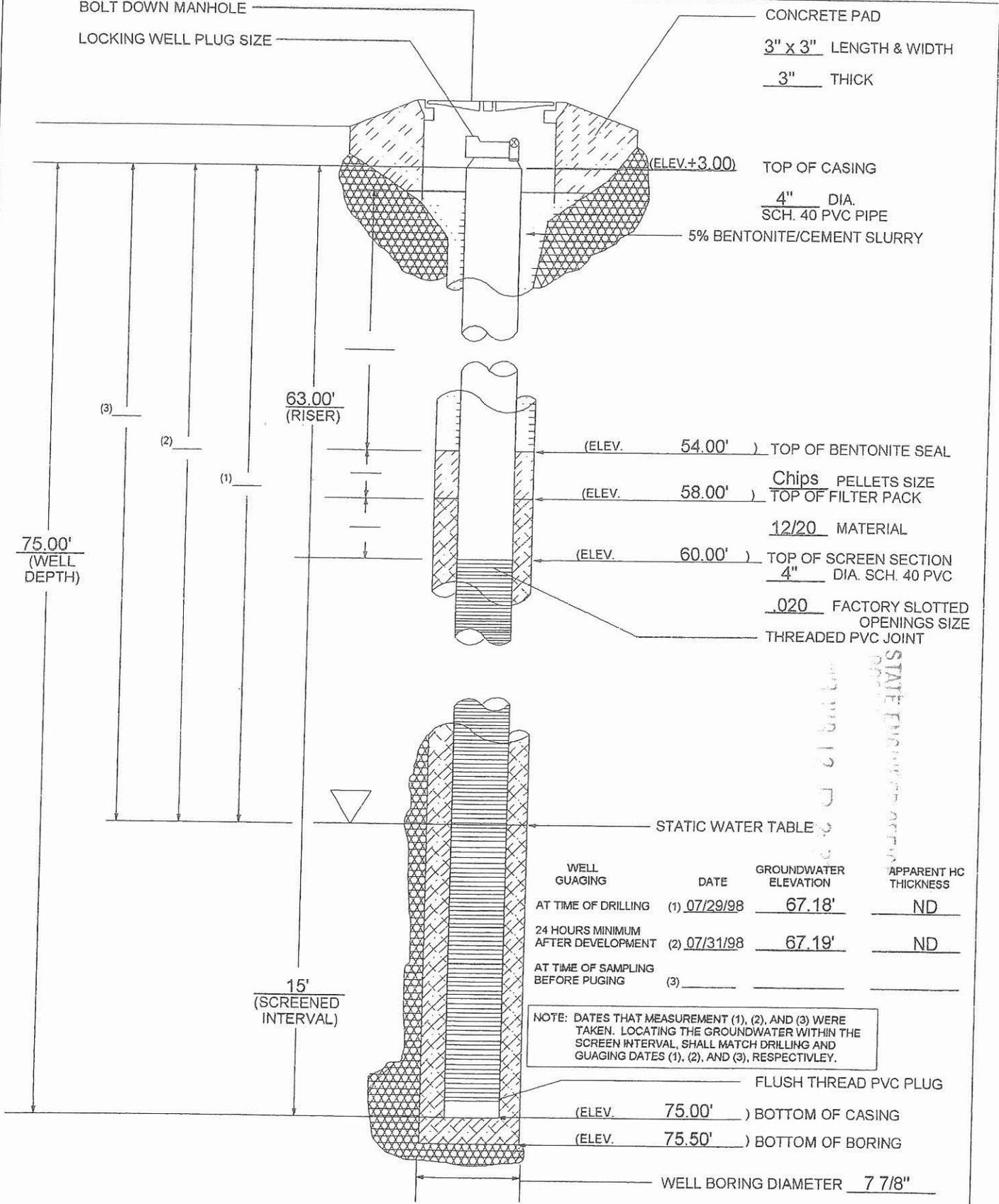
STATE ENVIRONMENTAL DEPARTMENT
 DIVISION OF WELL REGULATION
 1217 N. 17th Street
 Denver, CO 80202

Monitor Well Installation Detail



Monitor Well Installation Detail

LOCATION: Grimes Tank Battery PROJECT NUMBER: 19349 INSTALLATION DATE: 07/29/98 MONITOR WELL NUMBER: GMW - 2

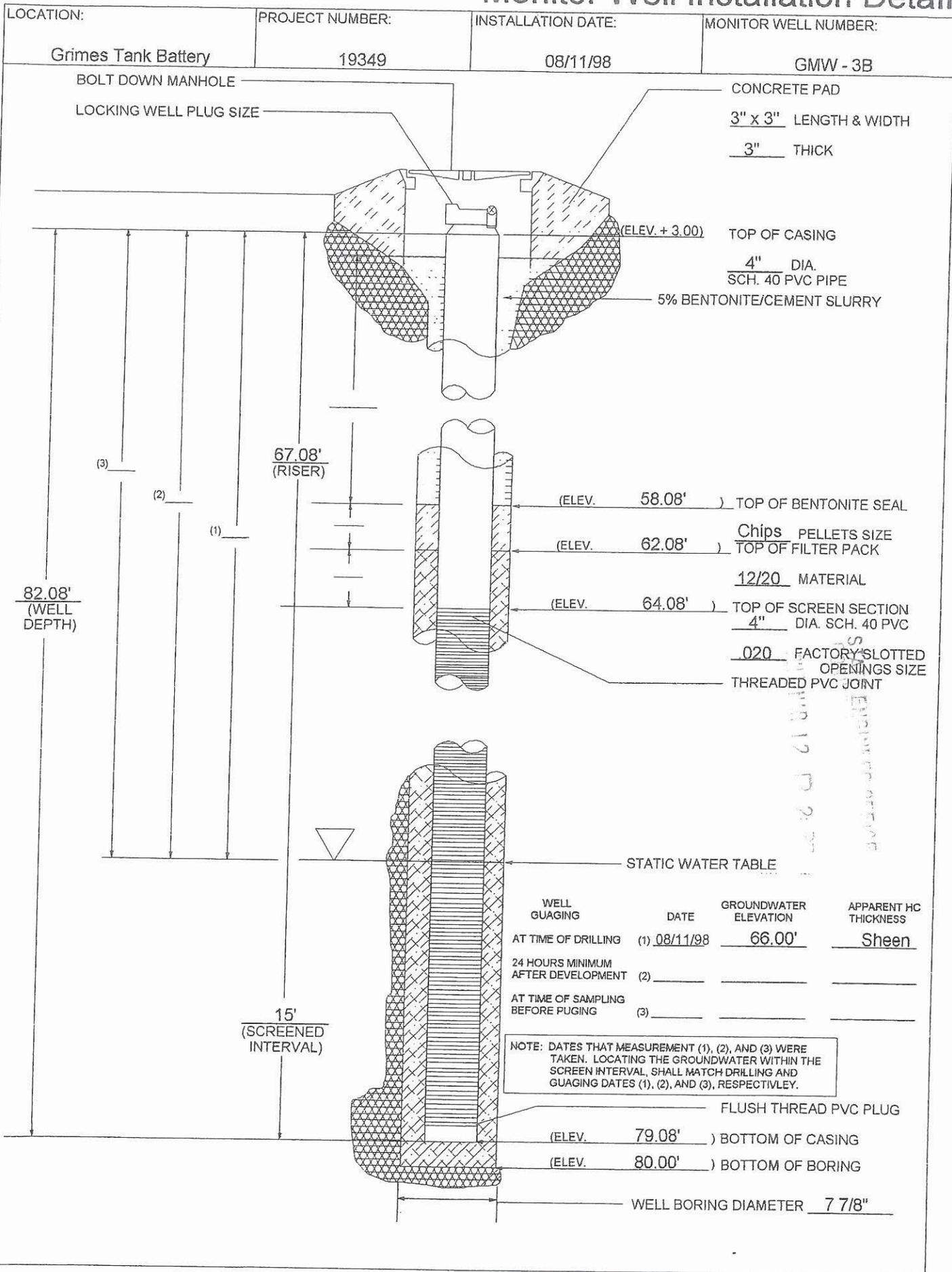


WELL GUAGING	DATE	GROUNDWATER ELEVATION	APPARENT HC THICKNESS
AT TIME OF DRILLING	(1) 07/29/98	67.18'	ND
24 HOURS MINIMUM AFTER DEVELOPMENT	(2) 07/31/98	67.19'	ND
AT TIME OF SAMPLING BEFORE PUGING	(3) _____	_____	_____

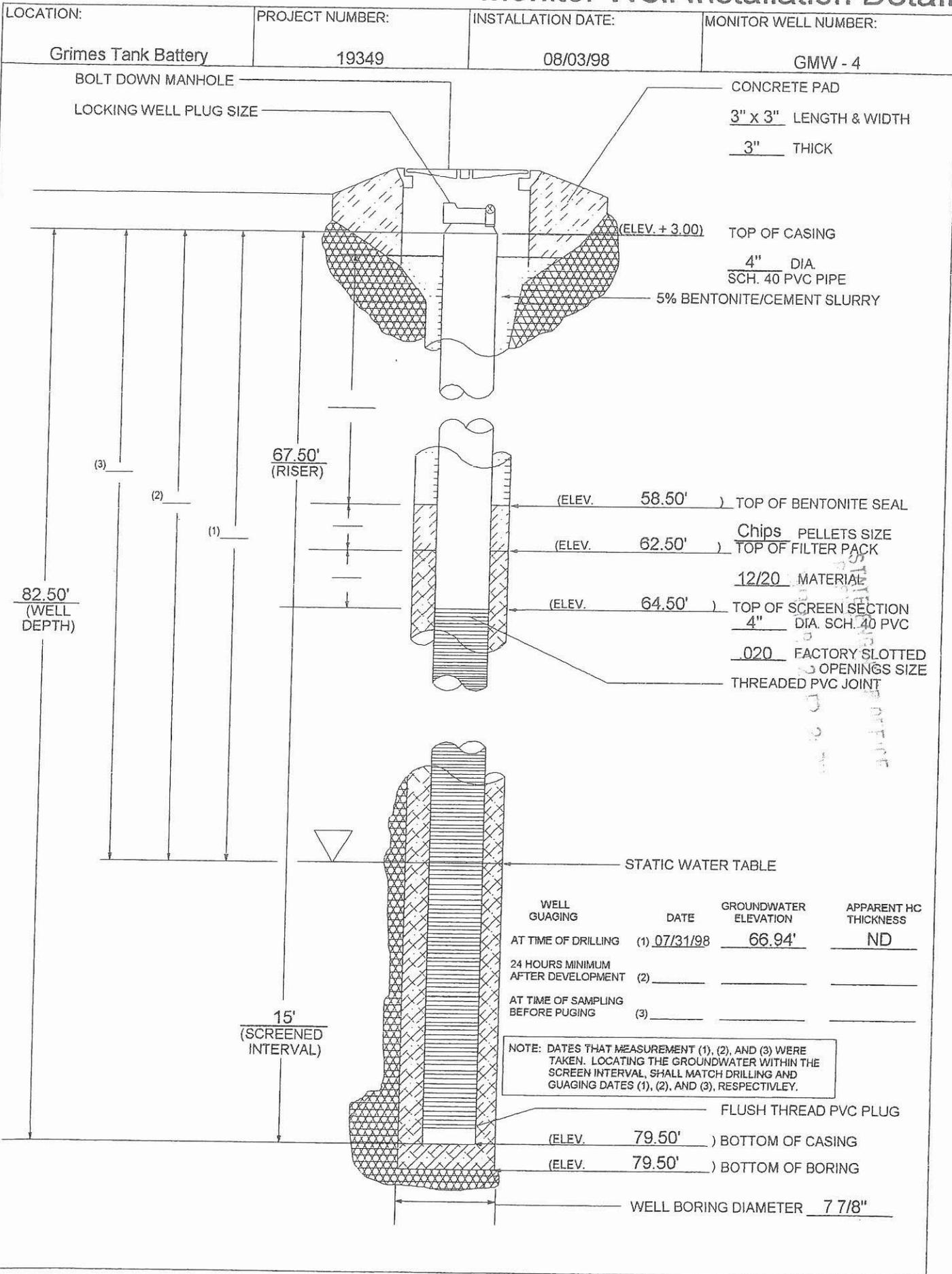
NOTE: DATES THAT MEASUREMENT (1), (2), AND (3) WERE TAKEN. LOCATING THE GROUNDWATER WITHIN THE SCREEN INTERVAL, SHALL MATCH DRILLING AND GUAGING DATES (1), (2), AND (3), RESPECTIVELY.

STATE ENGINEER OF TEXAS

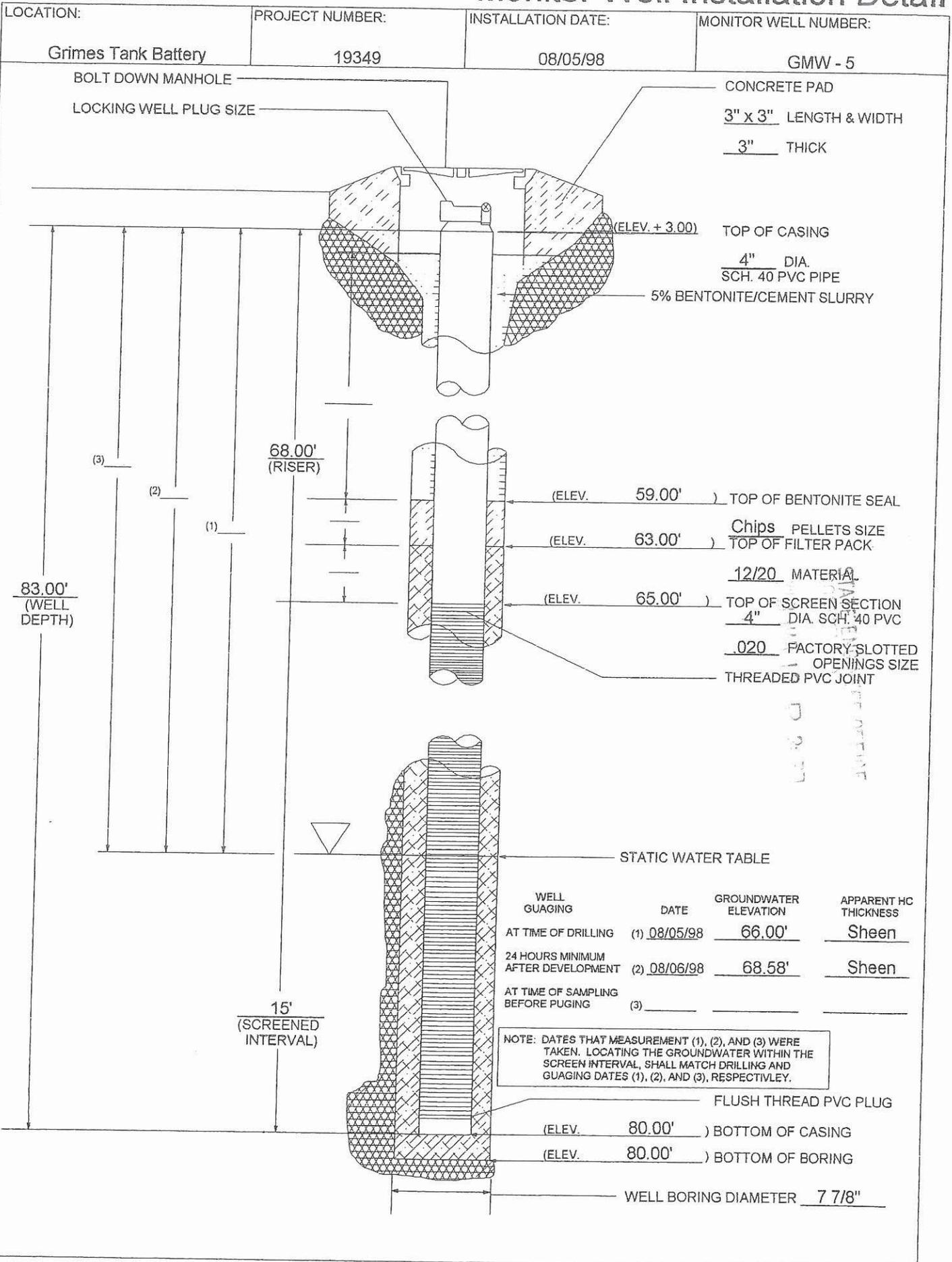
Monitor Well Installation Detail



Monitor Well Installation Detail

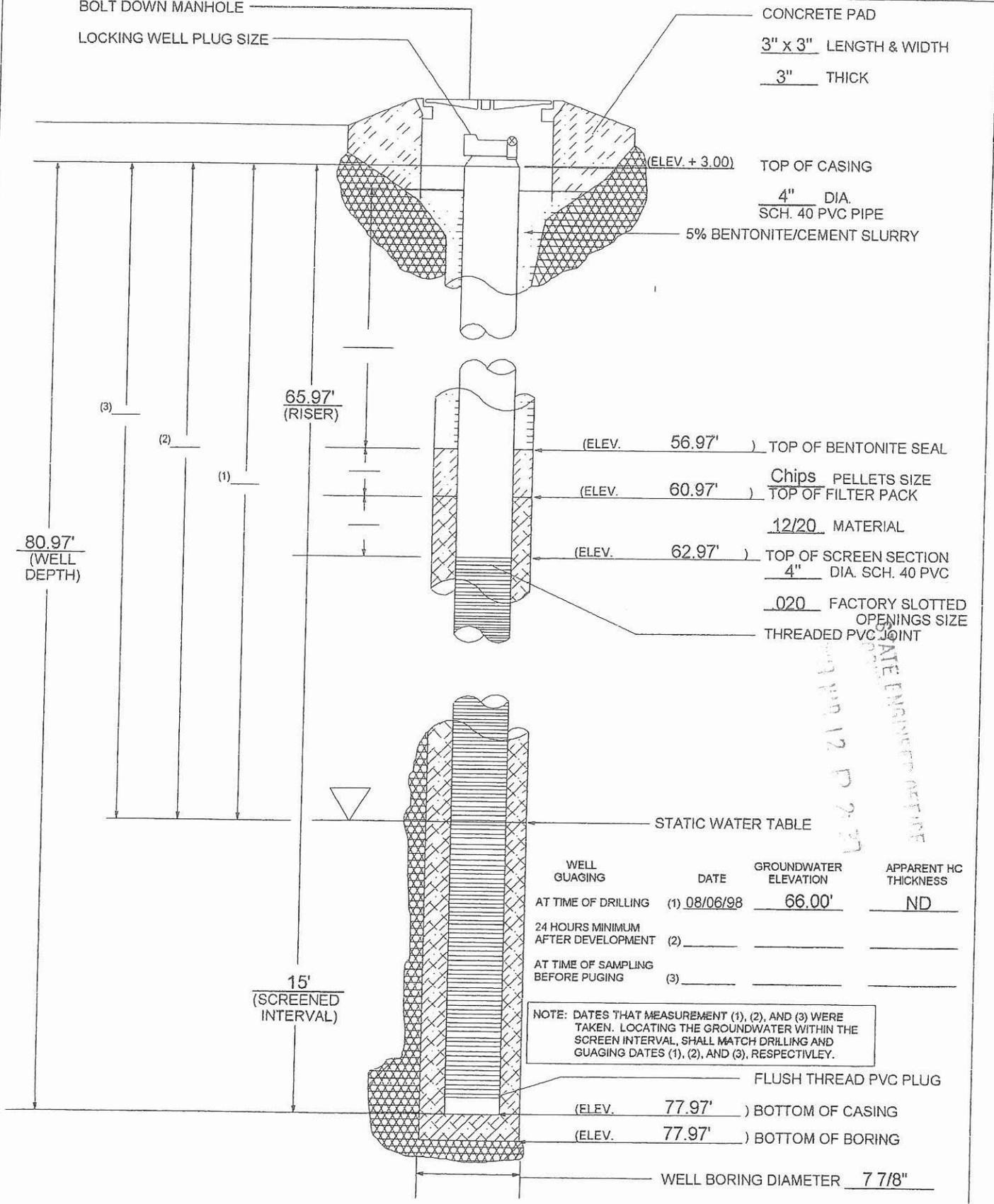


Monitor Well Installation Detail



Monitor Well Installation Detail

LOCATION:	PROJECT NUMBER:	INSTALLATION DATE:	MONITOR WELL NUMBER:
Grimes Tank Battery	19349	08/06/98	GMW - 6

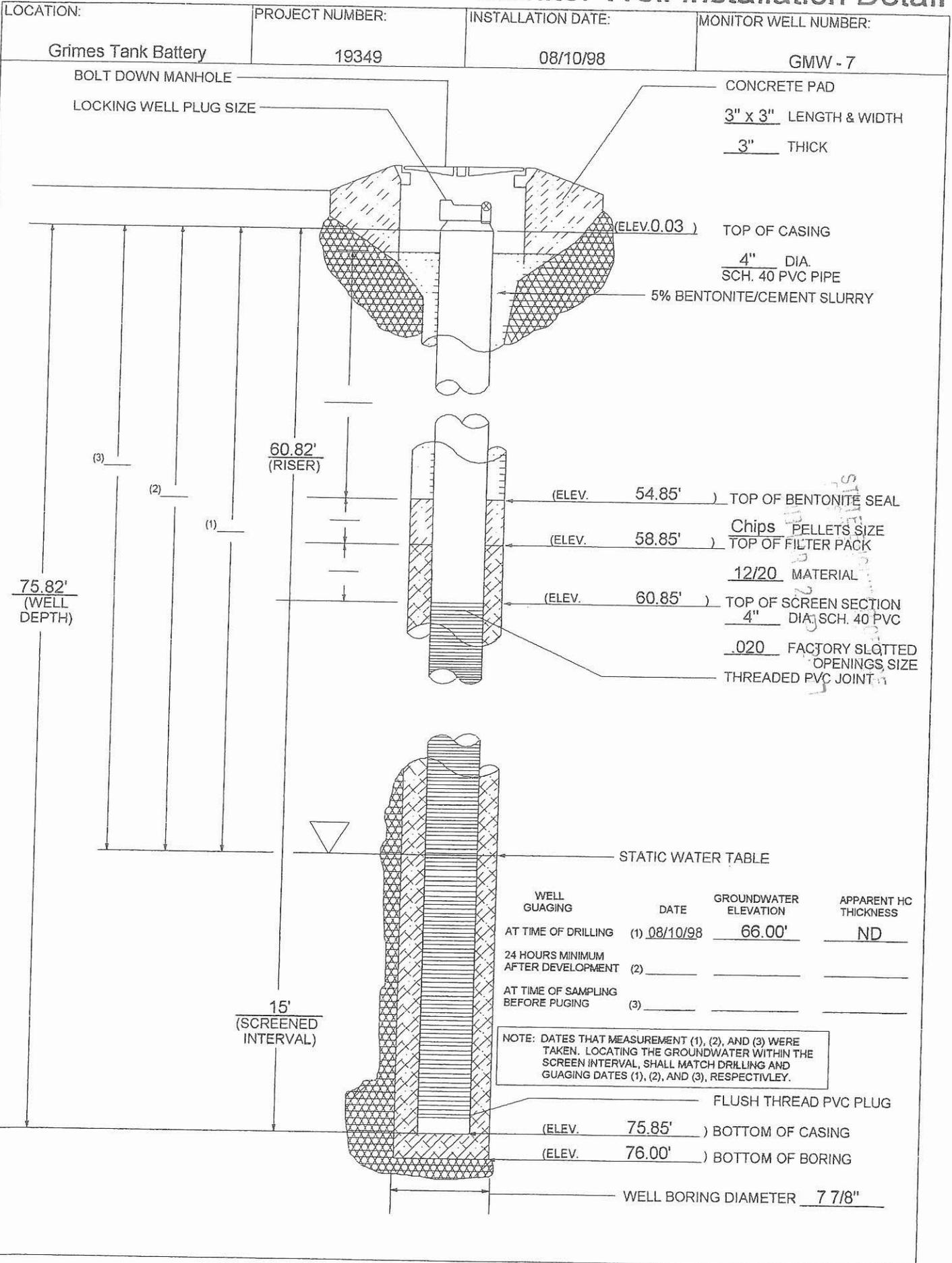


WELL GUAGING	DATE	GROUNDWATER ELEVATION	APPARENT HC THICKNESS
AT TIME OF DRILLING	(1) 08/06/98	66.00'	ND
24 HOURS MINIMUM AFTER DEVELOPMENT	(2)		
AT TIME OF SAMPLING BEFORE PUGING	(3)		

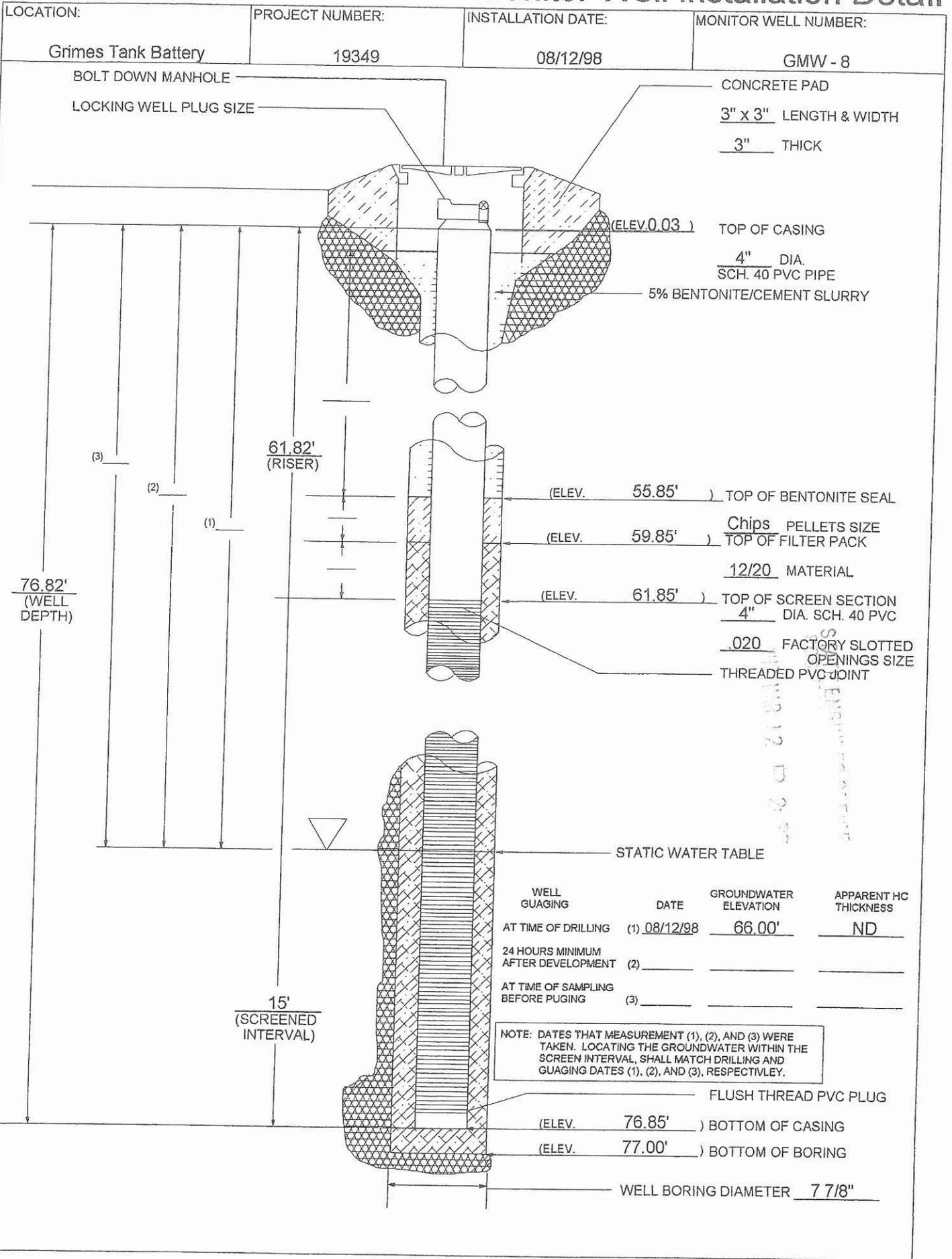
NOTE: DATES THAT MEASUREMENT (1), (2), AND (3) WERE TAKEN. LOCATING THE GROUNDWATER WITHIN THE SCREEN INTERVAL, SHALL MATCH DRILLING AND GUAGING DATES (1), (2), AND (3), RESPECTIVELY.

DATE ENGINEER OFFICE
 12 P 2-27

Monitor Well Installation Detail



Monitor Well Installation Detail



LOCATION: Grimes Tank Battery	PROJECT NUMBER: 19349	INSTALLATION DATE: 08/12/98	MONITOR WELL NUMBER: GMW - 8
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BOLT DOWN MANHOLE

LOCKING WELL PLUG SIZE

CONCRETE PAD
3" x 3" LENGTH & WIDTH
3" THICK

(ELEV. 0.03) TOP OF CASING

4" DIA. SCH. 40 PVC PIPE

5% BENTONITE/CEMENT SLURRY

61.82' (RISER)

(ELEV. 55.85') TOP OF BENTONITE SEAL

(ELEV. 59.85') Chips PELLETS SIZE TOP OF FILTER PACK

12/20 MATERIAL

(ELEV. 61.85') TOP OF SCREEN SECTION

4" DIA. SCH. 40 PVC

.020 FACTORY SLOTTED OPENINGS SIZE

THREADED PVC JOINT

76.82' (WELL DEPTH)

(3)

(2)

(1)

STATIC WATER TABLE

WELL GAUGING	DATE	GROUNDWATER ELEVATION	APPARENT HC THICKNESS
AT TIME OF DRILLING	(1) 08/12/98	66.00'	ND
24 HOURS MINIMUM AFTER DEVELOPMENT	(2) _____	_____	_____
AT TIME OF SAMPLING BEFORE PUGING	(3) _____	_____	_____

NOTE: DATES THAT MEASUREMENT (1), (2), AND (3) WERE TAKEN. LOCATING THE GROUNDWATER WITHIN THE SCREEN INTERVAL, SHALL MATCH DRILLING AND GAUGING DATES (1), (2), AND (3), RESPECTIVELY.

15' (SCREENED INTERVAL)

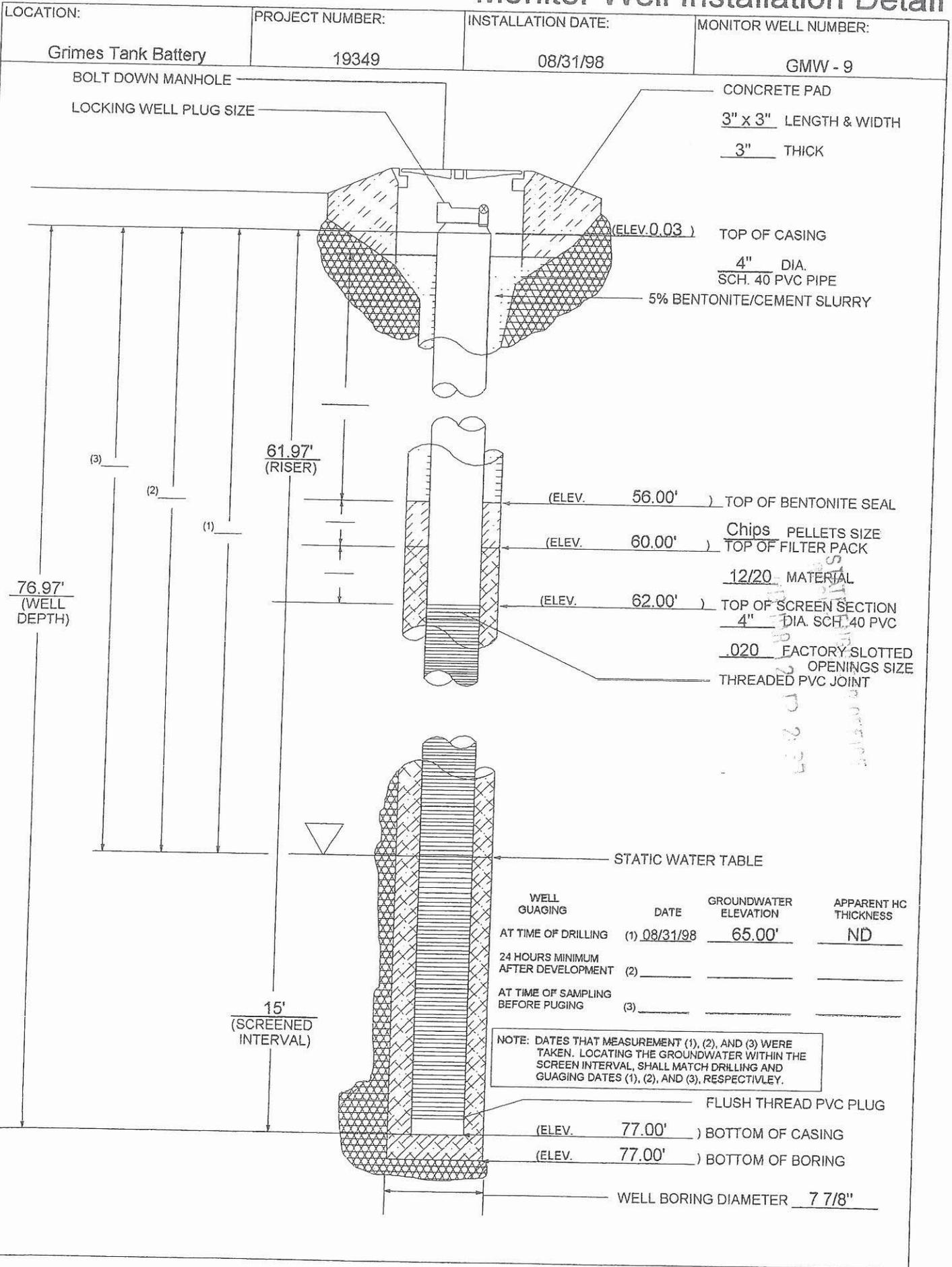
FLUSH THREAD PVC PLUG

(ELEV. 76.85') BOTTOM OF CASING

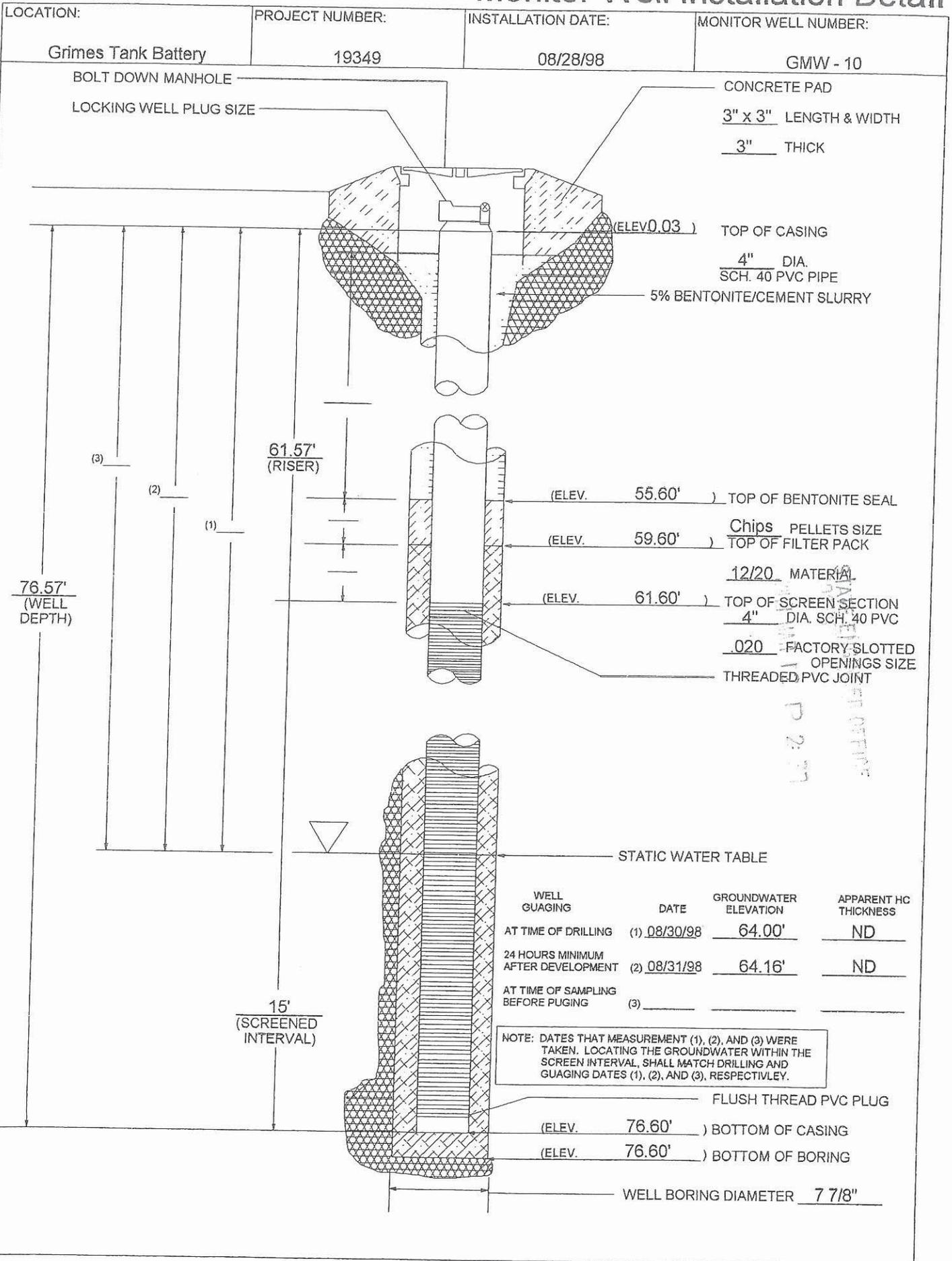
(ELEV. 77.00') BOTTOM OF BORING

WELL BORING DIAMETER 7 7/8"

Monitor Well Installation Detail

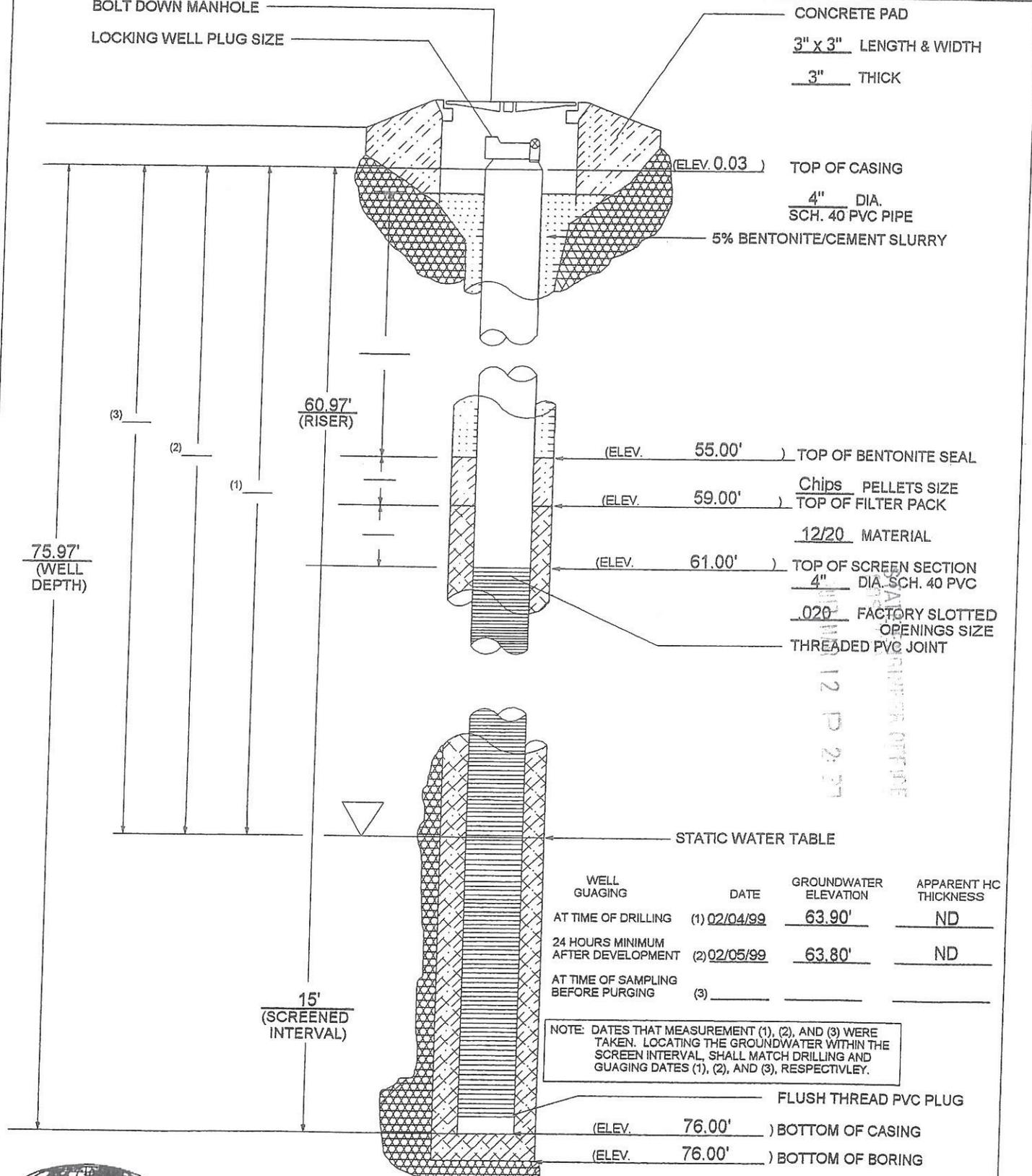


Monitor Well Installation Detail



Monitor Well Installation Detail

LOCATION: Grimes Tank Battery PROJECT NUMBER: INSTALLATION DATE: 02/04/99 MONITOR WELL NUMBER: GMW - 11



WELL GUAGING	DATE	GROUNDWATER ELEVATION	APPARENT HC THICKNESS
AT TIME OF DRILLING	(1) 02/04/99	63.90'	ND
24 HOURS MINIMUM AFTER DEVELOPMENT	(2) 02/05/99	63.80'	ND
AT TIME OF SAMPLING BEFORE PURGING	(3) _____	_____	_____

NOTE: DATES THAT MEASUREMENT (1), (2), AND (3) WERE TAKEN. LOCATING THE GROUNDWATER WITHIN THE SCREEN INTERVAL, SHALL MATCH DRILLING AND GUAGING DATES (1), (2), AND (3), RESPECTIVELY.



BBC International, Inc.
Hobbs, New Mexico



PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805
E-MAIL. cbrunson@bbcinternational.com

March 11, 2012

New Mexico State Engineer's Office
1900 W. 2nd Street
Roswell, NM 88201

SUBJECT: Well Plugging, Plan of Operations

To Whom It May Concern:

On behalf of Shell Exploration and Production Company, BBC International, Inc. respectfully submits this Plan of Operations for the plugging of eleven ground water monitoring wells located in the City of Hobbs, NM, Lea County. I have attached the Well Plugging Plan of Operations form and copies of the monitor well installation diagrams. The names of these wells are GMW-1 – GMW-11 and they were installed in 1997, 1998 and 1999. The wells range in depth of approximately 75 – 83 feet. There had been crude oil on the water table, but that has now been completely removed, hence, the approval from the Oil Conservation Division to plug these wells.

This site was an oilfield remediation site since 1997 and has been administered by the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division. On February 12, 2013, the Oil Conservation Division granted approval to plug and abandon the monitor wells at the site. The approval letter is attached for your reference.

I was informed that only one form was necessary for the eleven wells. I hope this is correct. I look forward to receiving the approval to plug and abandon these wells as soon as possible. Please send the plugging approval to my attention at: P. O. Box 805, Hobbs, NM 88241. Upon completion of the plugging operations, the Plugging Record forms will be sent in to your office.

If you have any questions, please contact me at (575) 397-6388 or via electronic mail:
cbrunson@bbcinternational.com.

Sincerely,

Cliff P. Brunson
President

enclosure

STATE ENGINEER'S OFFICE
MAR 11 12 PM 2:34

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



February 12, 2013

Lynn Walker
Shell Exploration & Production Company
200 N. Dairy Ashford Rd.
Houston, Texas 77079

RE: Westgate Subdivision/Grimes Battery & Tasker Road (AP-2) in Unit Letter K of Section 28, Township 18 South, Range 38 East NMPM in Hobbs, New Mexico

Mr. Walker,

I have reviewed the *Groundwater Monitoring Closure Report AP-2 July 2012* submitted on your behalf by BBC International on September 20, 2012 regarding the above-referenced site. The available information indicates Shell Exploration & Production Company (Shell) has met the requirements of 19.15.29 NMAC and no further corrective action is required. You are hereby notified abatement plan AP-2 is closed.

This determination by the Oil Conservation Division does not relieve Shell of responsibility should future information indicate a threat to ground water, surface water, human health, or the environment. Furthermore, it does not relieve Shell of responsibility for compliance with any federal, state, or local laws and/or regulations.

Please properly plug the eleven remaining monitoring wells per requirements of the New Mexico Office of the State Engineer and forward copies of the plugging reports to me. Thank you.

Respectfully,

A handwritten signature in blue ink, appearing to read "J. Griswold".

Jim Griswold
Senior Hydrologist

cc: Geoff Leking, OCD District I Office, Hobbs
Cliff Brunson, BBC International

STATE ENGINEER'S OFFICE
FEB 12 10 27 AM



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-1)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/18/2013 Date well plugging concluded: 3/18/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 52.9 sec
Longitude: 103 deg, 09 min, 22.3 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 70.4 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: Dry ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

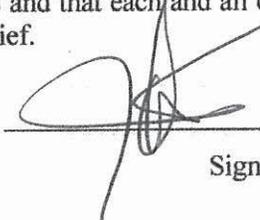
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0 70.40	Type 2 Portland cement w/5% quick gel mix	45.0	45.9712	pump w/tremie pipe from bottom up	

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13

Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-2)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 54.9 sec
Longitude: 103 deg, 09 min, 24.7 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 72.0 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: Dry ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

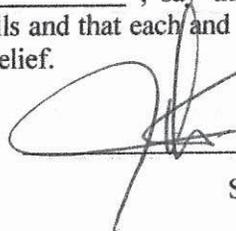
For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0 72.0	Type 2 Portland cement w/5% quick gel mix	45.0	47.016	pump w/tremie pipe from bottom up	

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13
Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-3B)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/18/13 Date well plugging concluded: 3/18/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 52.7 sec
Longitude: 103 deg, 09 min, 23.5 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 69.35 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: Dry ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

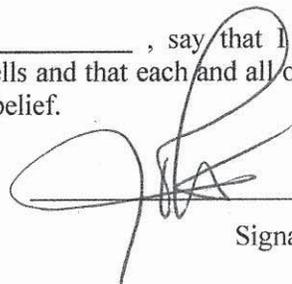
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments (“casing perforated first”, “open annular space also plugged”, etc.)
0 69.35	Type 2 Portland cement w/5% quick gel mix	45.0	45.285	pump w/tremie pipe from bottom up	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



 Signature of Well Driller

4/5/13

 Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-4)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 51.5 sec
Longitude: 103 deg, 09 min, 23.7 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 75.9 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: 73.50 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

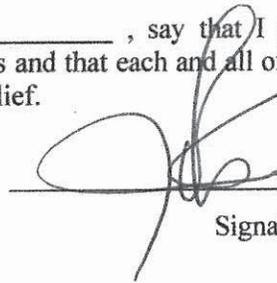
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0 75.90	Type 2 Portland cement w/5% quick gel mix	48.0	49.5627	pump w/tremie pipe from bottom up	

MULTIPLY		BY	AND OBTAIN
cubic feet	x	7.4805	= gallons
cubic yards	x	201.97	= gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.


Signature of Well Driller

4/5/13
Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-5)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 52.2 sec
Longitude: 103 deg, 09 min, 27.6 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 76.0 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: 74.85 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-6)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: White Drilling Company, Inc.

2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins

4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13

5) GPS Well Location: Latitude: 32 deg, 42 min, 51.2 sec
Longitude: 103 deg, 09 min, 22.4 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 74.0 ft below ground level (bgl),
by the following manner: tape measure

7) Static water level measured at initiation of plugging: Dry ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

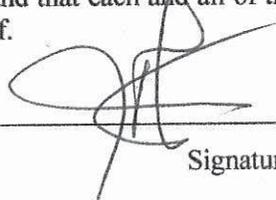
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0 74.0	Type 2 Portland cement w/5% quick gel mix	48.0	48.322	pump w/tremie pipe from bottom up	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13

Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-7)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: White Drilling Company, Inc.

2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins

4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13

5) GPS Well Location: Latitude: 32 deg, 42 min, 51.4 sec
Longitude: 103 deg, 09 min, 20.1 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 71.6 ft below ground level (bgl),
by the following manner: tape measure

7) Static water level measured at initiation of plugging: Dry ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

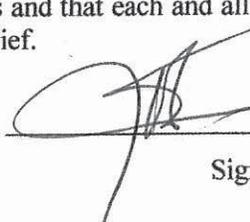
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments (“casing perforated first”, “open annular space also plugged”, etc.)
0 71.60	Type 2 Portland cement w/5% quick gel mix	45.0	46.7548	pump w/tremie pipe from bottom up	

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.


Signature of Well Driller

4/5/13
Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-8)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 52.8 sec
Longitude: 103 deg, 09 min, 20.4 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 75.70 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: 75.40 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

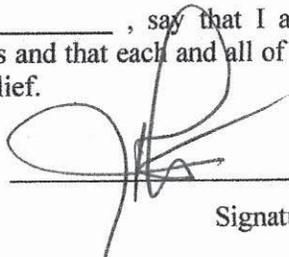
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments (“casing perforated first”, “open annular space also plugged”, etc.)
0 75.70	Type 2 Portland cement w/5% quick gel mix	48.0	49.4321	pump w/tremie pipe from bottom up	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13

Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-9)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: White Drilling Company, Inc.
- 2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins
- 4) Date well plugging began: 3/18/13 Date well plugging concluded: 3/18/13
- 5) GPS Well Location: Latitude: 32 deg, 42 min, 53.8 sec
Longitude: 103 deg, 09 min, 21.8 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 76.0 ft below ground level (bgl),
by the following manner: tape measure
- 7) Static water level measured at initiation of plugging: 75.0 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

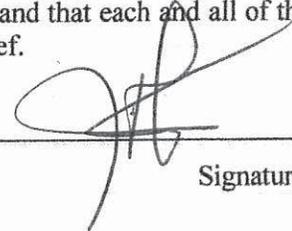
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments (“casing perforated first”, “open annular space also plugged”, etc.)
0 76.0	Type 2 Portland cement w/5% quick gel mix	48.0	49.628	pump w/tremie pipe from bottom up	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13

Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-10)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: White Drilling Company, Inc.

2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins

4) Date well plugging began: 3/19/13 Date well plugging concluded: 3/19/13

5) GPS Well Location: Latitude: 32 deg, 42 min, 53.3 sec
Longitude: 103 deg, 09 min, 25.5 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 75.85 ft below ground level (bgl),
by the following manner: tape measure

7) Static water level measured at initiation of plugging: 72.90 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

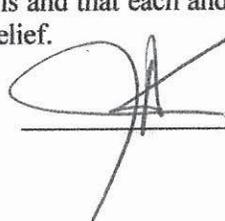
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0 75.85	Type 2 Portland cement w/5% quick gel mix	48.0	49.5300	pump w/tremie pipe from bottom up	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13

Date



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: Not Permitted (GMW-11)

Well owner: Shell Exploration & Production Co. Phone No.: (832) 337-2206

Mailing address: 200 N. Dairy Ashford Rd.

City: Houston State: Texas Zip code: 77079

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: White Drilling Company, Inc.

2) New Mexico Well Driller License No.: WD-1456 Expiration Date: 9/30/2014

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): William B. Atkins

4) Date well plugging began: 3/18/13 Date well plugging concluded: 3/18/13

5) GPS Well Location: Latitude: 32 deg, 42 min, 55.6 sec
Longitude: 103 deg, 09 min, 22.0 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 74.10 ft below ground level (bgl),
by the following manner: tape measure

7) Static water level measured at initiation of plugging: 73.10 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 3/14/2013

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

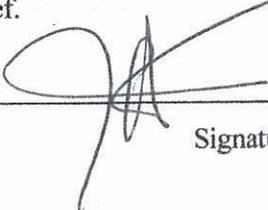
For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0 74.10	Type 2 Portland cement w/5% quick gel mix	48.0	48.3873	pump w/tremie pipe from bottom up	

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, John W. White, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

4/5/13

Date







