



May 23, 2006

Mr. Ju-tseng Liu
Unit Chief, Southern California Cleanup Operations
Site Mitigation Operations Branch
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

Subject: Lockheed Beaumont Potrero Site Abandonment of Three (3) Former Production Wells, Beaumont Site 1, Beaumont, California

Reference: a) Abandonment of Former Production Wells at Beaumont Site 1, Beaumont, California; Letter Report Workplan dated August 11, 2003
b) Revised and Updated "No Effect" Activities for Environmental Remediation at Beaumont Site 1 (Potrero Creek Site) Formerly Owned by Lockheed Martin Corporation dated, "No Effect" activities letter submitted to USFWS 19 May 2004

Dear Mr. Liu:

On behalf of Lockheed Martin Corporation (LMC), Tetra Tech, Inc. (Tetra Tech) has prepared this report to document the destruction of three former groundwater production wells located at Beaumont Site 1 (Site) (see Figure 1). These wells were located adjacent to a former motor washout facility (well W-1-1), the Betatron building (well W-1-2), and remnants of a former windmill (well W-1-5) (see Figure 2). Groundwater investigations indicate the presence of chlorinated hydrocarbon in groundwater at or nearby these wells. The purpose of the well destruction activities was to minimize the potential for cross-contamination between the water bearing zones and to complete work as agreed upon between LMC and Property Owner (State of California Department of Fish and Game, Wildlife Conservation Board) in the Purchase and Sales Agreement, dated December 22, 2003.

All well destruction work described in this report was done in accordance with the approved work plan (Approved Work Plan - Reference a). Tetra Tech and its subcontractor, J and H Drilling Co, Inc. (J and H Drilling), performed the well destruction activities on behalf of LMC. The areas where the well destruction was performed are sensitive habitat for the Stephens' Kangaroo Rat (SKR), a State and Federally listed threatened and endangered species. All work was done using mitigation and monitoring methods approved by the United States Fish and Wildlife Service (USFWS) and documented in the "No Effect" letter (Reference b) to USFWS.

Background Information

The three wells destroyed were former groundwater production wells located at Beaumont Site 1. Wells W-1-1 and W-1-2 were installed by LMC and well W-1-5 was a former agricultural supply well installed by the previous site owners prior to LMC's acquisition of the property. A review of available well records yielded no data concerning the three production wells. Visual observations and video logs of the wells performed in 1989 yielded the information provided in Table 1. The video logs also showed some sections of all three wells contained partial obstructions and degradation of the casing particularly the portion of the well casings above groundwater.

Table 1
Well Construction Data

Well ID	Well Material Type	Well Diameter (inches)	Total Depth (feet bgs)	Screened Interval (feet bgs)
W-1-1	Spiral Seamed Steel	14"	388	210-388
W-1-2	Steel	8"	247	93-247
W-1-5	Riveted Steel	12"	127	60-127
Note: bgs – below ground surface				

Based on historical hydrogeologic data and well construction of adjacent wells, individual wells may have been screened in one or more of the major geologic units beneath the Site including the Quaternary Alluvium, the Mount Eden Formation, or the basement granite. As reported in the work plan, groundwater elevations at W-1-1, W-1-2, and W-1-5 were 52 feet, 62 feet, and 120 feet below ground surface (bgs), respectively.

Biological Constraints

The presence of the endangered SKR in the areas immediately surrounding all three wells required implementation of the provisions for non-intrusive activities as provided for in the Approved Work Plan and mitigation measures as specified in the No-Effect Activities Letter (Reference b). The non-intrusive methods included leaving the well's monument and surface completion in place and sealing the well by grouting to ground surface without perforating the well casing. The condition of the well casings also precluded perforating the casings as well. These variances of the surface abandonment methodology were performed with the approval of the local regulatory agency (Riverside County Department of Environmental Health [DEH]).

A Section 10A permitted biologist evaluated each well location prior to any field activities to determine access concerns and required mitigation. The locations of wells W-1-1 and W-1-5 could be accessed with a small drill rig by using avoidance measures and load spreading mats. Well W-1-2 was located in an area of extremely high SKR density with soil characteristics such that foot pressure could cause disturbance to SKR burrows. Therefore, no vehicular access to this well was possible. An approved representative of a Section 10A permitted biologist supervised all potential disturbance activities and observed and directed the measures taken to limit the effects of the disturbance. Mitigation measures included flagging of SKR burrows for avoidance, the use of load spreading mats and plywood sheets, and prohibiting and/or limiting vehicle access in certain areas.

Well Destruction Permit Process

In planning for the destruction of the wells, the DEH was contacted in October 2003 to discuss abandonment methodology and to obtain well destruction permits. DEH personnel stated that the wells could be destroyed by grouting the well from the bottom up using a tremie pipe with a 10-sack sand slurry without perforating the casing. DEH also approved grouting the wells without the use of a tremie pipe using a concrete truck and pump parked on existing roads with a hose running to the well, if required due to biological constraints. The grout was to be pumped at a slow rate to prevent bridging in the lower casing. For both grouting methods, the amount of pumped concrete was to be compared against the calculated volume of the casing to ensure the entire well casing volume had been filled. Well permits for the destruction of the three wells were initially obtained in October 2003 and renewed in September 2005 for the destruction methods described above. DEH was consulted prior to the start of well destruction field activities and elected not to have an inspector present during the well destruction. Copies of the 2003 and 2005 permits are provided in Attachment 2.

Well Destruction Methodology

All three wells were destroyed by filling the well casings with a 10-sack grout to ground surface in accordance with the Approved Work Plan. The top of wells W-1-1 and W-1-5 were modified to allow

for placement of the grout with a tremie pipe and collection of the potentially contaminated displaced well water. The tremie pipe was lowered into these wells and was sealed using a sanitary seal. A hose was attached to a pipe fitting welded to the side of the well casing to capture any water or grout displaced as the well was filled with grout. All captured water and grout was contained in a portable tank for later disposal. Grout was pumped into wells W-1-1 and W-1-5 from the bottom up using a tremie pipe. Well W-1 was filled in two pumping events. The first pumping event filled W-1-1 to above the screened interval. The grout was allowed to settle and partially cure, and, three days later, the casing was filled to the surface with grout. The 6-inch submersible pump, wiring, and pump piping in well W-1-1 were removed and disposed of prior to well destruction. No displaced water was collected from Well W-1-5. As grout reached the surface during grouting of W-1-5, grout began seeping out of ground near the casing indicating the deteriorated and damaged condition of the well casing.

Well W-1-2 was destroyed by welding a pressure cap to the surface completion and filling the well with pressurized grout via piping from a concrete truck and pump parked in the nearby existing road. Well W-1-2 generated no displaced water because the pressure grouting method pushed the water out of the casing back into the formation.

As approved by the DEH, the wells were not perforated prior to grouting. Consultation with drilling contractors and a well perforation specialist indicated that perforation using a mills knife or by explosives had a high risk of causing well casing collapse in the deteriorated wells. Additionally, the explosive perforation process would have the potential to introduce explosives residue into the groundwater.

Monuments and surface completions were left in place to avoid SKR disturbance. The casing extension at W-1-1 and W-1-5 and the pressure cap at W-1-2 were cut off, and a steel cap was welded to the top of each casing. Well preparatory activities (welding casing extensions, installation of pressure cap, removal of pump in W-1-1, etc.) began on 9 September 2005 and well destruction was completed on 21 October 2005. In all cases the volume of grout placed in the wells exceeded the volume calculated for each well prior to destruction. Table 2 summarizes the destruction information for each well.

Table 2
Well Destruction Information

Well ID	Date Well Destruction Began	Date Well Destruction Completed	Grout Quantity		Comments
			Calculated Quantity to Fill Well	Actual Quantity Pumped	
W-1-1 (first pumping event)	10/18/05	10/18/05	8.83 cu. yd.	10 cu. yd.	Filled casing from TD (363' bgs) to 140' bgs. Approximately 1.17 cu. yd. of grout pushed into formation/annular space for this filling.
W-1-1 (second pumping event)	10/21/05	10/21/05	5.42 cu. yd.	5.5 cu. yd.	Approximately 0.08 cu. yd. of grout pushed into formation/annular space for this filling. Total of 1.25 cu. yd. of grout pushed into formation/annular space.
W-1-2	10/19/05	10/19/05	3.2 cu. yd.	4.0 cu. yd.	Approximately 0.8 cu. yd. of grout pushed into formation/annular space. Maximum surge pressure of 250 psi observed while pumping. Maintained pressure and pumping until 50 psi pressure could be maintained.
W-1-5	10/20/05	10/20/05	3.2 cu. yd.	5.5 cu. yd.	Approximately 2.3 cu. yd. of grout pushed into formation/annular space.

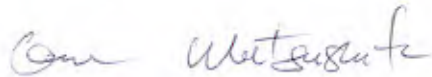
Notes: TD – total depth bgs- below ground surface
cu. yd. – cubic yards psi – pounds per square inch

California Department of Water Resources (DWR) well completion reports were completed by J and H Drilling following completion of the well destruction and are provided in Attachment 3. The DWR completion reports were also sent to DWR and Riverside County DEH directly following well destruction completion. Photographs of the well destruction process are provided in Attachment 4 to this report.

The destruction of the three former production wells at Beaumont Site 1 documented in this report were completed successfully in accordance with methods described in the approved work plan and additional requirements by DEH. All mitigation and monitoring measures for the protection of SKR were successfully implemented in completion of the work.

Should you have any questions or comments regarding this report or the well destruction procedures please contact me at (818) 847-0197 or Mr. Thomas Villeneuve of Tetra Tech at (909) 381-1674.

Sincerely,



Gene Matsushita
Technical Project Manager

Attachments: Attachment 1 – Figures
Attachment 2 – Well Destruction Permits
Attachment 3 – DWR Well Completion Reports
Attachment 4 - Photographs

CC: Dan Zogaib, DTSC (2 copies)

Mr. Ju-tseng Liu
May 23, 2006
Page 5 of 4

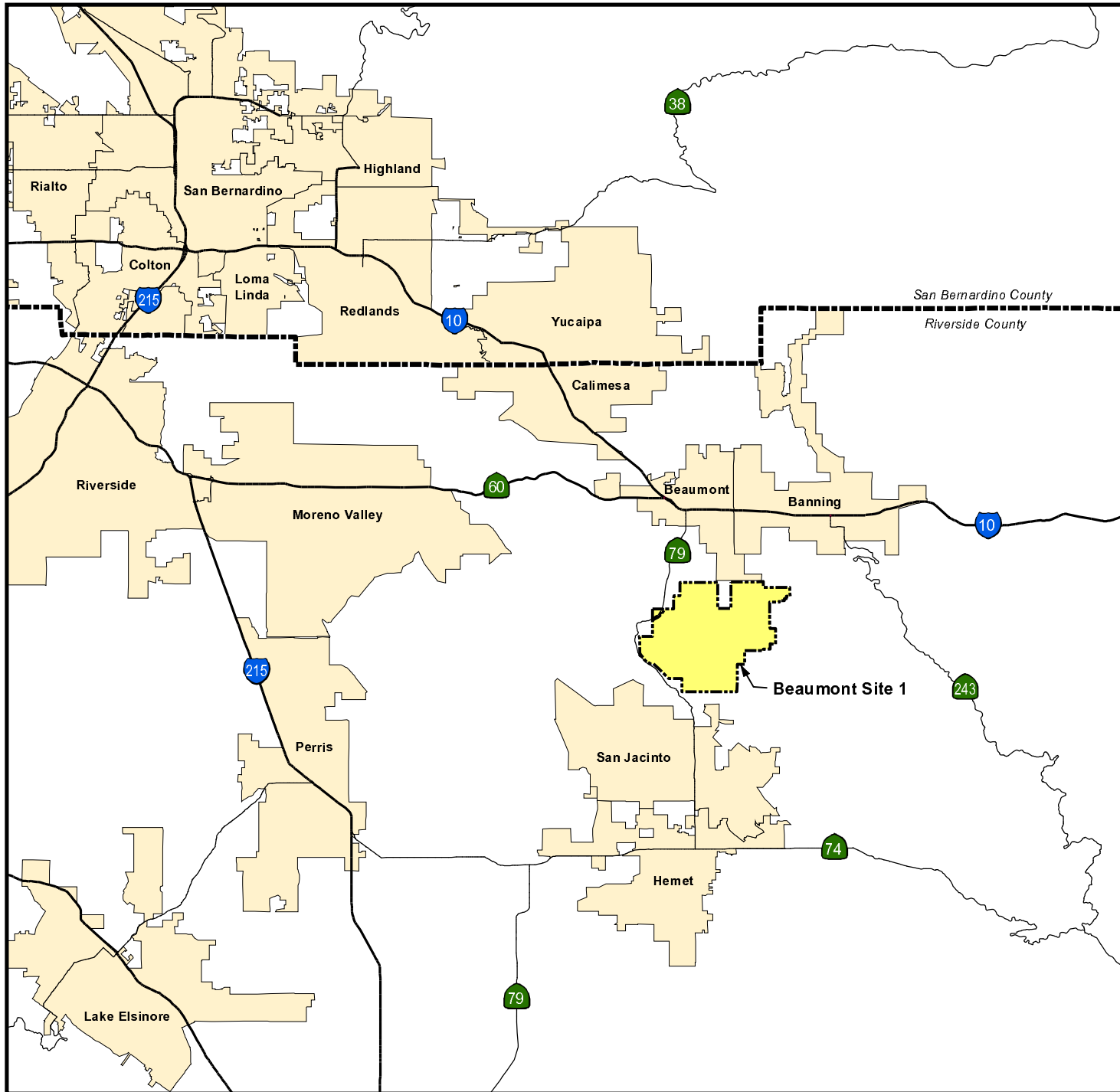
Bc: T. Villeneuve, Tetra Tech, Inc.
N. Shukla, Tetra Tech, Inc.

BUR120Beaumont 1 Production Well Abandonment Report.doc

Attachment 1

Figures

X:\GIS\LOCKHEED_WELL_ABANDREGION\MXD



0 3 6
Miles

Adapted from:

U.S. Census Bureau TIGER line data, 2000.

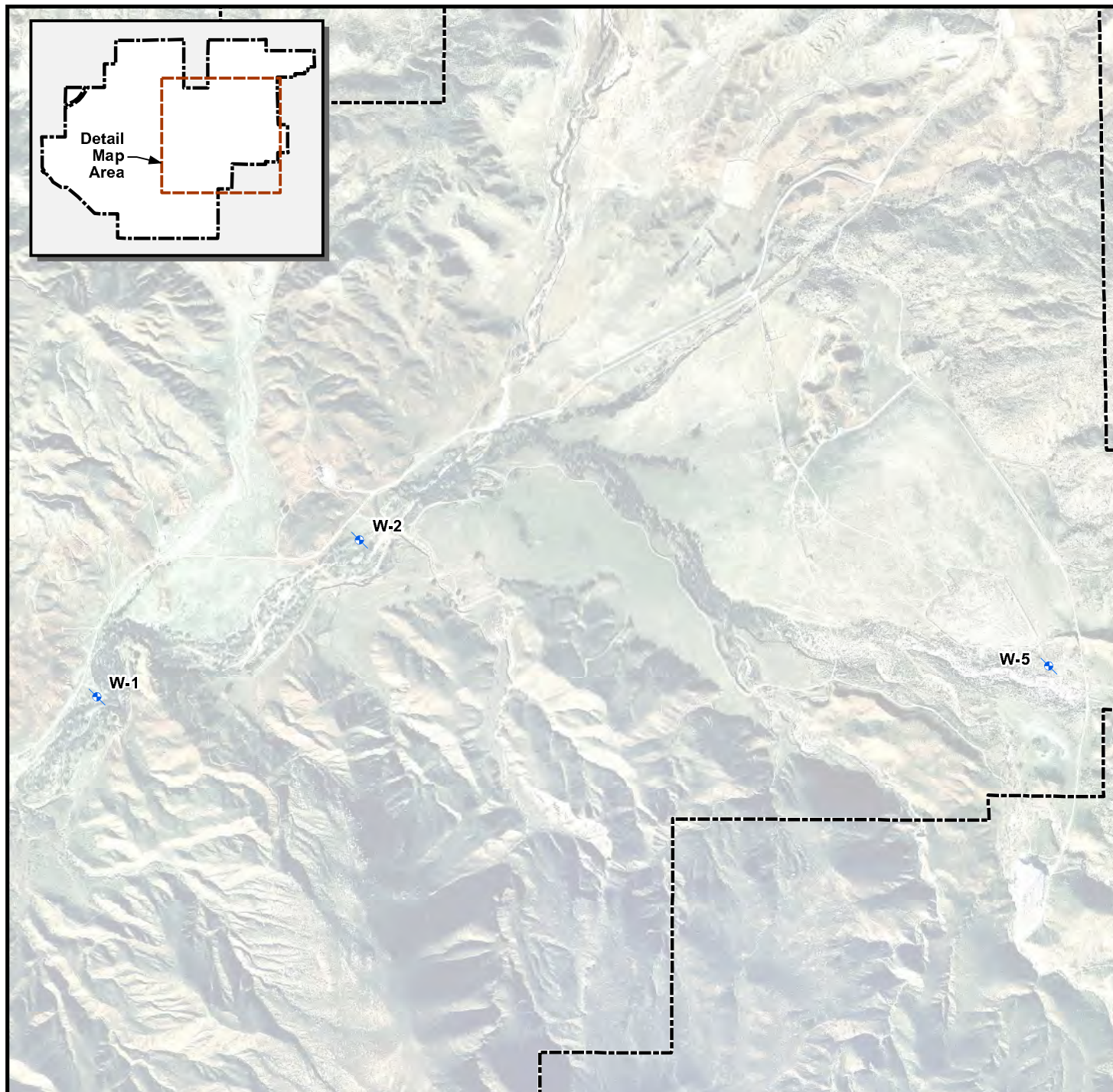
Beaumont Site 1

Figure 1
Regional Location of
Beaumont Site 1



Tetra Tech, Inc.



March 2006



0 1,000 2,000
Feet

Adapted from: February 2002 aerial photograph.

LEGEND

-  Abandoned Well
-  Site 1 Property Boundary

Beaumont Site 1

Figure 2
Location of
Abandoned Wells



Tetra Tech, Inc.

March 2006

Attachment 2
Well Destruction Permits

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

28226

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT
FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.

Date January 15, 2004

Expiration Date 7-8-04

Fee \$153.27
(non-refundable)

This permit is granted on condition that the person named in the permit will comply with the laws, ordinances and regulations that are now or may hereafter be in force.

LOCATION OF PROPOSED WELL NE $\frac{1}{4}$ NE $\frac{1}{4}$; Sec. 3; T 4S; R 1W

PHYSICAL ADDRESS OF WELL Beaumont Site #1 Community Beaumont

APN: 430-040-017

Well: W-1

NAME Lockheed Martin Corporation

DRILLER Water Development Corporation
5566 Arrow Highway
Montclair, Ca. 91763

MAILING ADDRESS 2550 N. Hollywood Way, 3rd Floor

CITY & STATE Burbank, Ca. 91505

ABANDONMENT

By Charlene Robbins
Charlene Robbins

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WELL PERMIT APPLICATION
(For Construction, Reconstruction & Destruction)

- ☐ 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980
☐ 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000
☒ 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180

Well: W-1

PLEASE REPLY TO ADDRESS CHECKED ABOVE

NOTE: Any abandoned wells on the property must be properly destroyed before an application for construction or reconstruction can be processed.

Please Print Consultant Chalk 0578

FOR DEPARTMENT USE ONLY

Permit No. 28226
Expiration 7/8/04

1. OWNER: Name Lockheed Martin Corporation
Mailing Address 2550 N. Hollywood Way, 3rd Floor
City Burbank State CA
Zip 91505 Phone No. (818) 847-0899

2. DATE OF WORK (approximate):
Start _____ Complete _____

3. WELL DRILLER
Name Water Development Corp
Riv. Co. Registration No. 04-051
C-57 License No. _____

4. WELL CHECK (check)
☐ Community ☐ Monitoring ☐ Industrial
☒ Individual ☐ Cathodic ☐ Other
☐ Agricultural ☐ Horizontal

4A. FOR MONITORING WELL: (Name of Consultant)
Name Tetra Tech Inc Phone 381-1674

5. TYPE OF WORK (check)
☐ New ☐ Reconstruction ☒ Destruction

5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.

6. ANNUAL SEAL:
Depth _____ ft.
Borehole Diam. _____ in.
Conductor Diam. _____ in.
Annular Thickness _____ in.
Sealing Material _____

7. DEPTH OF WELL (feet)
Proposed _____ Existing 388'
DIAMETER OF BORE (in.) ~14-16"

8. PRODUCTION WELL CASING INSTALLED:

☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
<u>0</u>	<u>388</u>	<u>14</u>	

GRAVEL PACK: ☐ Yes ☐ No Unknown

From _____ to _____ ft.

Type of rig _____

9. PERFORATIONS (if applicable):
From 210 to 388 ft.

10. SEALED ZONES (if applicable):
From _____ to _____ ft.

11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: **I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California.**

Driller's Signature NA Date _____

11B. I have read this application and agree to comply with all laws regulating the type of work being performed.

Driller's Signature [Signature] Date 11/17/03

12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application.

Property Owner's Signature Jinde Gattler for Lockheed Martin Corp Date 11-19-03

DISPOSITION OF PERMIT

FOR DEPARTMENT USE ONLY

Approved subject to the following:

- A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations:
☐ Prior to sealing of the annular space or filling of the conductor casing.
☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.
☐ After installation of the surface protective slab and pumping equipment.
☒ During destruction of wells, prior to pouring the sealing material.

B. Approved Plot Plan.

C. Submit to the Department within thirty (60) days after completion of work, a copy of:
☒ Water Well Driller's Report (DWR 188).

NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.

D. Other: _____

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

Well: W-1

OWNER'S NAME: Lockheed Martin Corporation

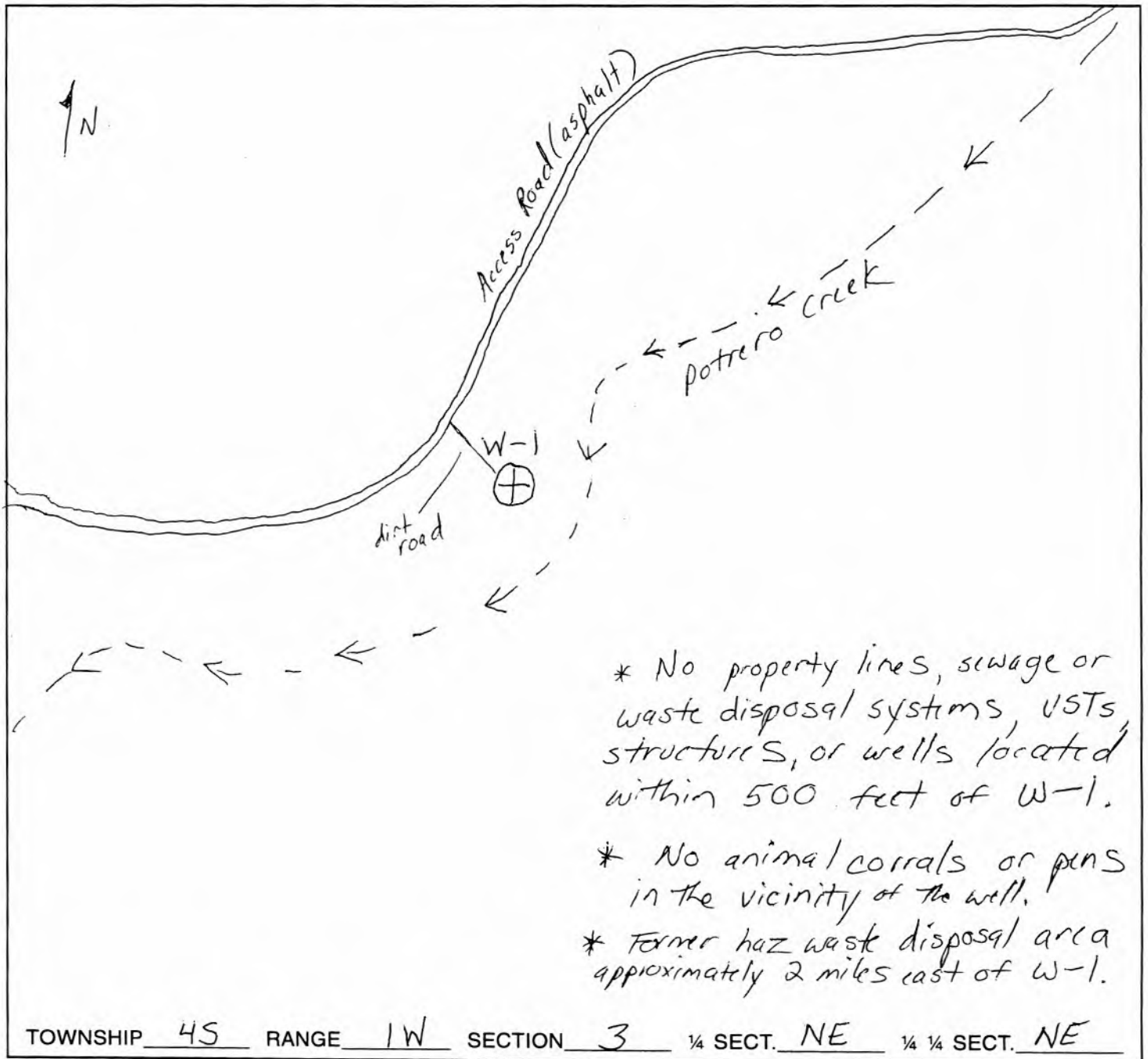
SITE: Beaumont Site #1

CITY: Beaumont, CA

ASSESSOR'S P.M. NO.: 430-040-017

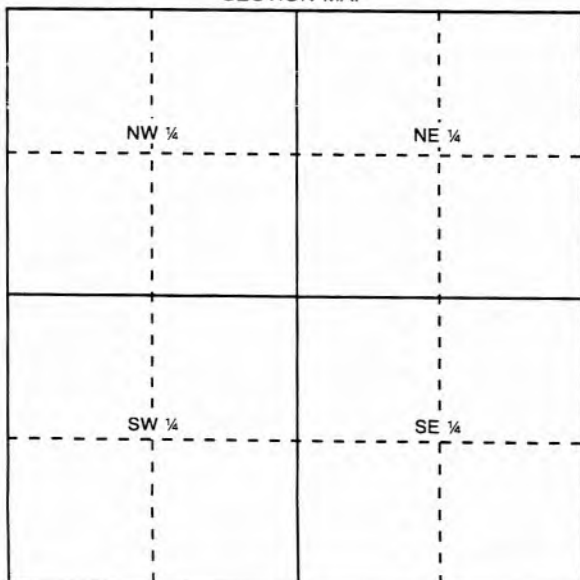
Department Use Only
PERMIT NO. _____

North



NOTE: Please see reverse side for information which must be shown on this Plot plan in order to process this permit application.

SECTION MAP



VICINITY MAP

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT
FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.

Date September 16, 2005

Expiration Date 3-14-06

Fee \$154.02
(non-refundable)

This permit is granted on condition that the person named in the permit will comply with the laws, ordinances and regulations that are now or may hereafter be in force.

LOCATION OF PROPOSED WELL _____ $\frac{1}{4}$ _____ $\frac{1}{4}$; Sec. 3; T 4S; R 1W

PHYSICAL ADDRESS OF WELL 17255 Highland Springs Rd Community Beaumont

APN: 421-250-012-1

Well: W-1

NAME Lockheed Martin Corporation

DRILLER

J & H Drilling Co. Inc.

MAILING ADDRESS 2550 N. Hollywood Way, 3rd Floor

1014 E. South Street

Anaheim, CA 92805

CITY & STATE Burbank, CA 91505

By

Charlene Robbins

Charlene Robbins

ABANDONMENT

Distribution: WHITE—Environmental Health Department; YELLOW—Owner; PINK—Well Driller; GOLDENROD—Flood Control

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WELL PERMIT APPLICATION
(For Construction, Reconstruction & Destruction)

- ☒ 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980
☐ 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000
☐ 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180

PLEASE REPLY TO ADDRESS CHECKED ABOVE

NOTE: Any abandoned wells on the property must be properly destroyed before an application for construction or reconstruction can be processed.

Please Print

EHW050846

FOR DEPARTMENT USE ONLY

Permit No. 30825
Expiration 3-14-06

1. OWNER: Name Lockheed Martin Corporation
Mailing Address 2550 N. Hollywood Way, 3rd Floor
City Burbank State CA
Zip 91505 Phone No. (818) 847-0899

2. DATE OF WORK (approximate):
Start Sept 19, 2005 Complete Sept 20, 2005

3. WELL DRILLER
Name JTH DRILLING CO INC
Riv. Co. Registration No. WOR 04-090
C-57 License No. 740854 05

4. WELL CHECK (check)
☐ Community ☐ Monitoring ☐ Industrial
☒ Individual ☐ Cathodic ☐ Other
☐ Agricultural ☐ Horizontal

4A. FOR MONITORING WELL: (Name of Consultant)
Name Tetra Tech Phone (909) 381-1674

5. TYPE OF WORK (check)
☐ New ☐ Reconstruction ☒ Destruction

5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.

6. ANNUAL SEAL:
Depth _____ ft.
Borehole Diam. _____ in.
Conductor Diam. _____ in.
Annular Thickness _____ in.
Sealing Material _____

7. DEPTH OF WELL (feet)
Proposed _____ Existing 388'
DIAMETER OF BORE (in.) 16"

8. PRODUCTION WELL CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
<u>0</u>	<u>388</u>	<u>14</u>	

GRAVEL PACK: ☐ Yes ☐ No Unknown
From _____ to _____ ft.

Type of rig PERCUSSION

9. PERFORATIONS (if applicable):
From 210 to 388 ft.

10. SEALED ZONES (if applicable):
From _____ to _____ ft.

11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California.

Driller's Signature _____ Date _____

11B. I have read this application and agree to comply with all laws regulating the type of work being performed.

Driller's Signature BRIAN HOLW PROS. Date 9/7/05

12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application.

Property Owner's Signature Thomas J. Vill Date 9-7-05

DISPOSITION OF PERMIT

Approved subject to the following:

FOR DEPARTMENT USE ONLY

- A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations:
☐ Prior to sealing of the annular space or filling of the conductor casing.
☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.
☐ After installation of the surface protective slab and pumping equipment.
→ ☒ During destruction of wells, prior to pouring the sealing material.

B. Approved Plot Plan.

C. Submit to the Department within thirty (60) days after completion of work, a copy of:

→ ☒ Water Well Driller's Report (DWR 188).

NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.

D. Other: _____

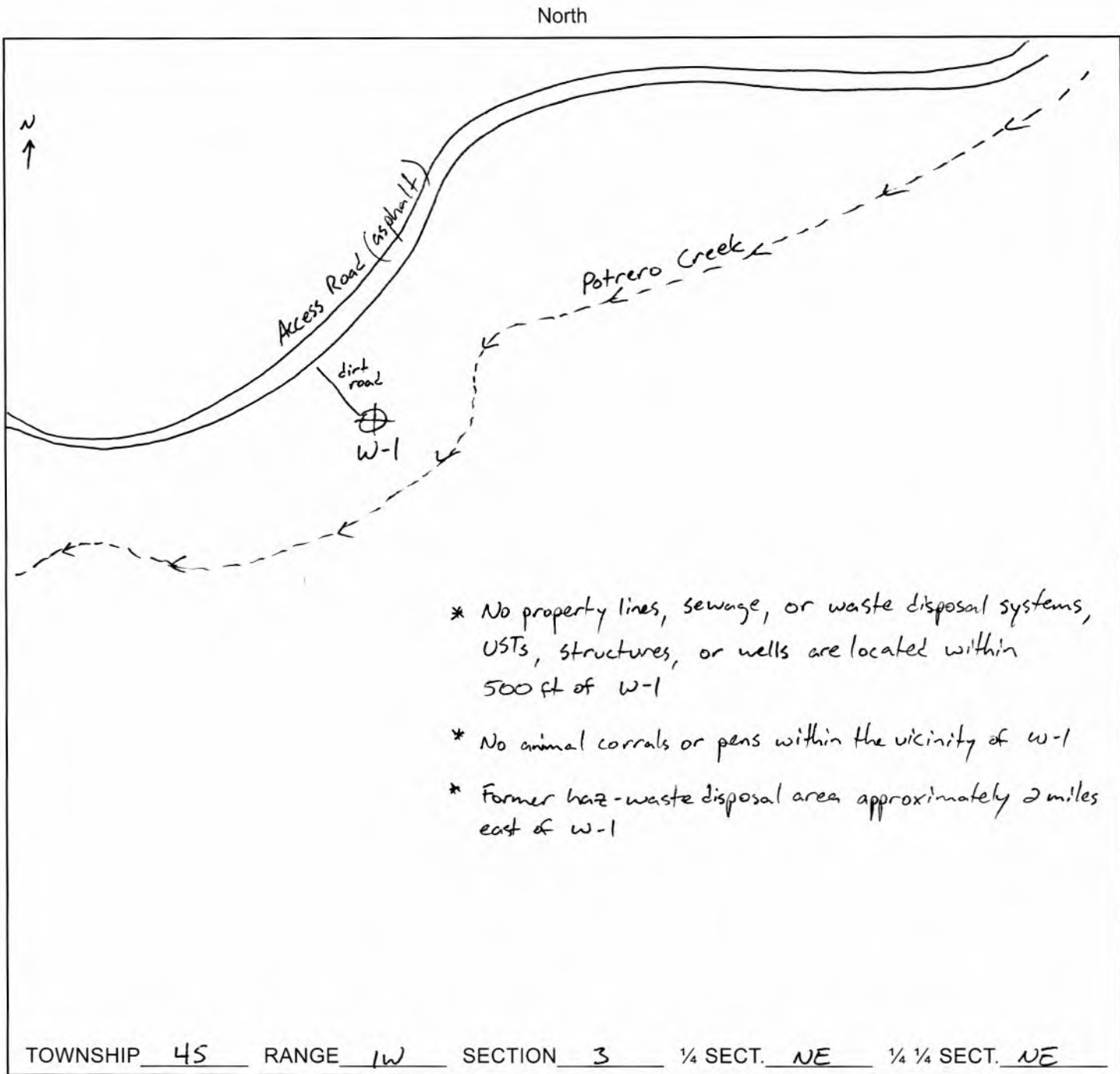
COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

OWNER'S NAME: Lockheed Martin Corporation
SITE: Beaumont site #1
CITY: Beaumont, CA
ASSESSOR'S P.M. NO.: 430-040-017

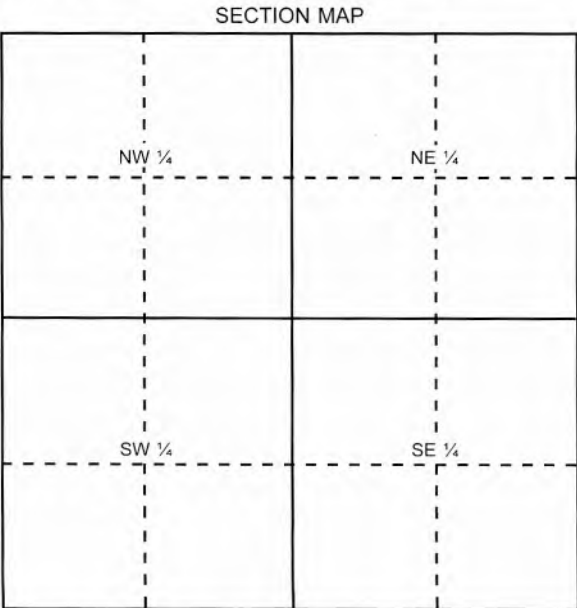
Well: W-1

Department Use Only

PERMIT NO. _____



NOTE: Please see reverse side for information which must be shown on this Plot plan in order to process this permit application.



VICINITY MAP

ATTACHMENT NO. 1
(FOR WELL PERMIT PLOT PLAN)

1. The Plot Plan shall show the proposed well location with respect to the following items which a radius of five-hundred feet (500') from the well;
 - a. Property lines, including ownership.
 - b. Sewage or waste disposal systems, (including reserved waste disposal expansion areas), or works for carrying or containing sewage or waste.
 - c. Location of underground storage tank(s).
 - d. All intermittent or perennial, natural, or artificial bodies of water or watercourses.
 - e. The approximate drainage pattern of the property.
 - f. Other wells, including abandoned wells.

NOTE: All abandoned wells on this property must be properly destroyed before a new well permit can be issued.

 - g. Access road(s) to the well site.
 - h. Structures.
2. Location of the property on a vicinity map including the legal description of the property (Assessor's Parcel Map/Tract Map Number).
3. Location and classification by visual inspection of any solid, liquid, or hazardous waste disposal sites to include municipal and individual package sewage treatment plants within two-thousand (2,000') feet of the proposed well.
4. Animal corrals and pens.
5. Other information that has been requested by the Health Department to determine if the underground waters will be adequately protected.

This space to be used to describe reconstruction or destruction method used:

Well W-1

Because of the endangered species Stephen's kangaroo rat (SKR) in high density around the well location and the soil type of the area around the well vehicle access to the well for well destruction is limited. Due to the SKR concerns and resultant access problems, as well as well casing current condition, the well will be destroyed by filling with grout from the bottom of the well using a 10-sack sand slurry without perforating the casing. The grout will be pumped into the well using a tremie pipe lowered to the bottom of the well. The grout will be pumped at a slow rate to prevent bridging in the lower casing. The amount of pumped concrete will be compared against the calculated volume of the casing to ensure the entire well casing volume has been filled. Because of the SKR located around the well excavation of the well surface completion will not be possible. The well surface completion will be left in place and the well will be grouted as described above to the top of the casing.

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

28227

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT
FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.

Date January 15, 2004

Expiration Date 7-8-04

Fee \$153.27
(non-refundable)

This permit is granted on condition that the person named in the permit will comply with the laws, ordinances and regulations that are now or may hereafter be in force.

LOCATION OF PROPOSED WELL SW 1/4 SW 1/4; Sec. 36; T 4S; R 1W

PHYSICAL ADDRESS OF WELL Beaumont Site #1 Community Beaumont

APN: 430-040-017

Well: W-2

NAME Lockheed Martin Corporation

DRILLER Water Development Corporation
5566 Arrow Highway
Montclair, Ca. 91763

MAILING ADDRESS 2550 N. Hollywood Way, 3rd Floor

CITY & STATE Burbank, Ca. 91505

ABANDONMENT

By Charlene Robbins
Charlene Robbins

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WELL PERMIT APPLICATION
(For Construction, Reconstruction & Destruction)

- ☐ 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980
☐ 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000
☒ 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180

Well: W-2

PLEASE REPLY TO ADDRESS CHECKED ABOVE

Eng 5011 11-25-78
NOTE: Any abandoned wells on the property must be properly destroyed before an application for construction or reconstruction can be processed.

Please Print *ETW 040019*
consultant check 0578

FOR DEPARTMENT USE ONLY

Permit No. 28227
Expiration 7/8/04

1. OWNER: Name Lockheed Martin Corporation
Mailing Address 2550 N. Hollywood Way, 3rd Floor
City Burbank State CA
Zip 91505 Phone No. (818) 847-0899

2. DATE OF WORK (approximate):
Start _____ Complete _____

3. WELL DRILLER
Name Water Development Corp
Riv. Co. Registration No. 04-051
C-57 License No. _____

4. WELL CHECK (check)
☐ Community ☐ Monitoring ☐ Industrial
☒ Individual ☐ Cathodic ☐ Other
☐ Agricultural ☐ Horizontal

4A. FOR MONITORING WELL: (Name of Consultant)
Name Tetra Tech Inc Phone 381-1674

5. TYPE OF WORK (check)
☐ New ☐ Reconstruction ☒ Destruction

5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.

6. ANNUAL SEAL:
Depth _____ ft.
Borehole Diam. _____ in.
Conductor Diam. _____ in.
Annular Thickness _____ in.
Sealing Material _____

7. DEPTH OF WELL (feet)
Proposed _____ Existing 250'
DIAMETER OF BORE (in.) ~12-14" 8-10"

8. PRODUCTION WELL CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
<u>0</u>	<u>250</u>	<u>8</u>	

GRAVEL PACK: ☐ Yes ☐ No Unknown
From _____ to _____ ft.

Type of rig _____

9. PERFORATIONS (if applicable):
From 93 to 250 ft.

10. SEALED ZONES (if applicable):
From _____ to _____ ft.

11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: **I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California.**

Driller's Signature NA Date _____

11B. I have read this application and agree to comply with all laws regulating the type of work being performed.

Driller's Signature [Signature] Date 11/17/03

12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application.

Property Owner's Signature Andre Gutler for Lockheed Martin Corp. Date 11-19-03

DISPOSITION OF PERMIT

Approved subject to the following:

FOR DEPARTMENT USE ONLY

- A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations:
☐ Prior to sealing of the annular space or filling of the conductor casing.
☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.
☐ After installation of the surface protective slab and pumping equipment.
☒ During destruction of wells, prior to pouring the sealing material.

B. Approved Plot Plan.

C. Submit to the Department within thirty (60) days after completion of work, a copy of:
☒ Water Well Driller's Report (DWR 188).

NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.

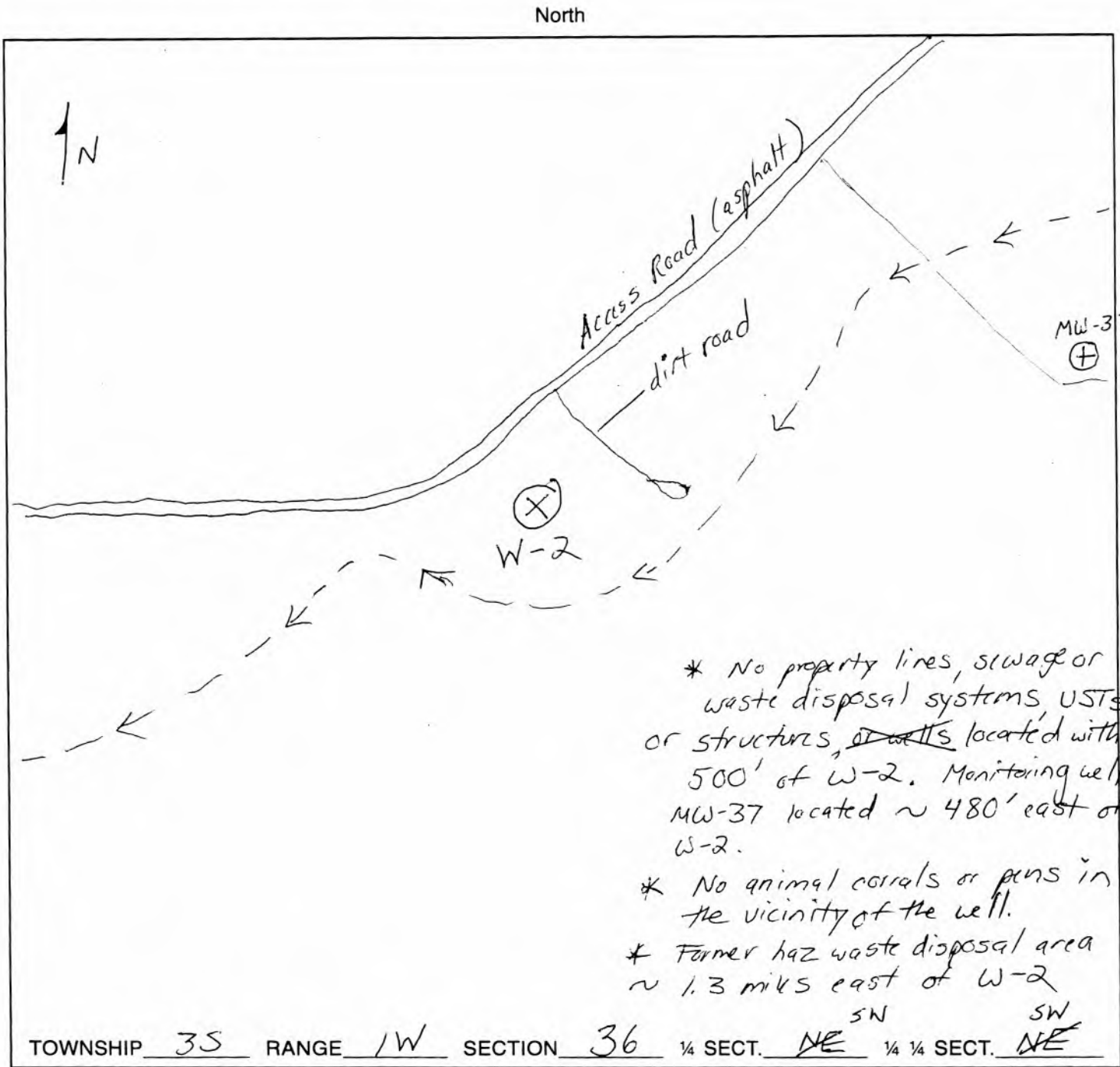
D. Other: _____

**COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH**

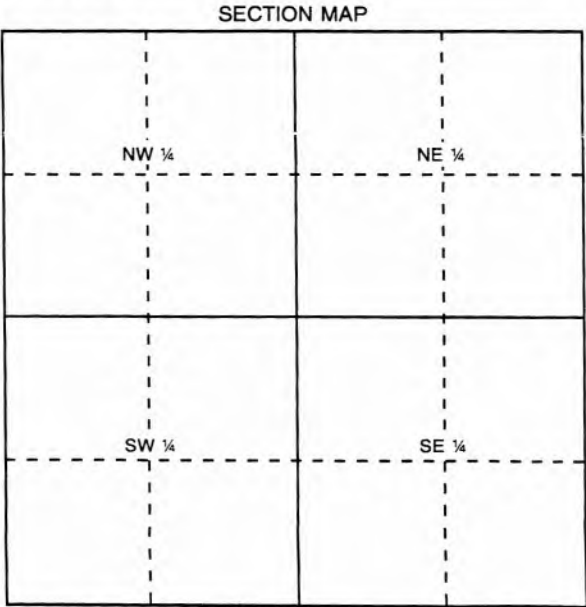
Well: W-2

OWNER'S NAME: Lockheed Martin Corporation
 SITE: Beaumont Site #1
 CITY: Beaumont, CA
 ASSESSOR'S P.M. NO.: 430-040-017

Department Use Only
 PERMIT NO. _____



NOTE: Please see reverse side for information which must be shown on this Plot plan in order to process this permit application.



VICINITY MAP

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT
FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.

Date September 16, 2005

Expiration Date 3-14-06

Fee \$154.02

(non-refundable)

This permit is granted on condition that the person named in the permit will comply with the laws, ordinances and regulations that are now or may hereafter be in force.

LOCATION OF PROPOSED WELL _____ $\frac{1}{4}$ _____ $\frac{1}{4}$; Sec. 35; T 3S; R 1W

PHYSICAL ADDRESS OF WELL 17255 Highland Springs Rd Community Beaumont

APN: 421-250-010-9

Well: W-2

NAME Lockheed Martin Corporation

DRILLER

J & H Drilling Co. Inc.

1014 E. South Street

MAILING ADDRESS 2550 N. Hollywood Way, 3rd Floor

Anaheim, CA 92805

CITY & STATE
Burbank, CA 91505

By

Charlene Robbins

Charlene Robbins

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WELL PERMIT APPLICATION
(For Construction, Reconstruction & Destruction)

- ☒ 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980
☐ 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000
☐ 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180

PLEASE REPLY TO ADDRESS CHECKED ABOVE

NOTE: Any abandoned wells on the property must be properly destroyed before an application for construction or reconstruction can be processed.

Please Print

FW050847

Consultant's Plan (#0666)
Tetra Tech, Inc.
#462-06100

Well: W-2

FOR DEPARTMENT USE ONLY

Permit No.

30826

Expiration

3-14-06

1. OWNER: Name Lockheed Martin Corporation
Mailing Address 2550 N. Hollywood Way, 3rd Floor
City Burbank State CA
Zip 91505 Phone No. (818) 847-0899

2. DATE OF WORK (approximate):
Start Sept 20, 2005 Complete Sept 21, 2005

3. WELL DRILLER
Name JET DRILLING CO INC
Riv. Co. Registration No. WDR 04-090
C-57 License No. 74085405

4. WELL CHECK (check) W-2
☐ Community ☐ Monitoring ☐ Industrial
☒ Individual ☐ Cathodic ☐ Other
☐ Agricultural ☐ Horizontal

4A. FOR MONITORING WELL: (Name of Consultant)
Name Tetra Tech Phone (909) 381-1674

5. TYPE OF WORK (check) Chris Surdzial cell# (951) 35-2998
☐ New ☐ Reconstruction ☒ Destruction

5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.

6. ANNUAL SEAL:

Depth _____ ft.

Borehole Diam. _____ in.

Conductor Diam. _____ in.

Annular Thickness _____ in.

Sealing Material _____

7. DEPTH OF WELL (feet)

Proposed _____ Existing 250'

DIAMETER OF BORE (in.) ~8-10"

8. PRODUCTION WELL CASING INSTALLED:

☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
<u>0</u>	<u>250</u>	<u>8</u>	

GRAVEL PACK: ☐ Yes ☐ No unknown

From _____ to _____ ft.

Type of rig _____

9. PERFORATIONS (if applicable):

From 93 to 250 ft.

10. SEALED ZONES (if applicable):

From _____ to _____ ft.

11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California.

Driller's Signature _____ Date _____

11B. I have read this application and agree to comply with all laws regulating the type of work being performed.

Driller's Signature Brian Hagen, PRES Date 9/7/05

12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application.

Property Owner's Signature Thomas J. Vetter Date 9-7-05

DISPOSITION OF PERMIT

Approved subject to the following:

FOR DEPARTMENT USE ONLY

A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations:

- ☐ Prior to sealing of the annular space or filling of the conductor casing.
☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.
☐ After installation of the surface protective slab and pumping equipment.
☒ During destruction of wells, prior to pouring the sealing material.

B. Approved Plot Plan.

C. Submit to the Department within thirty (60) days after completion of work, a copy of:

- ☒ Water Well Driller's Report (DWR 188).

NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.

D. Other: _____

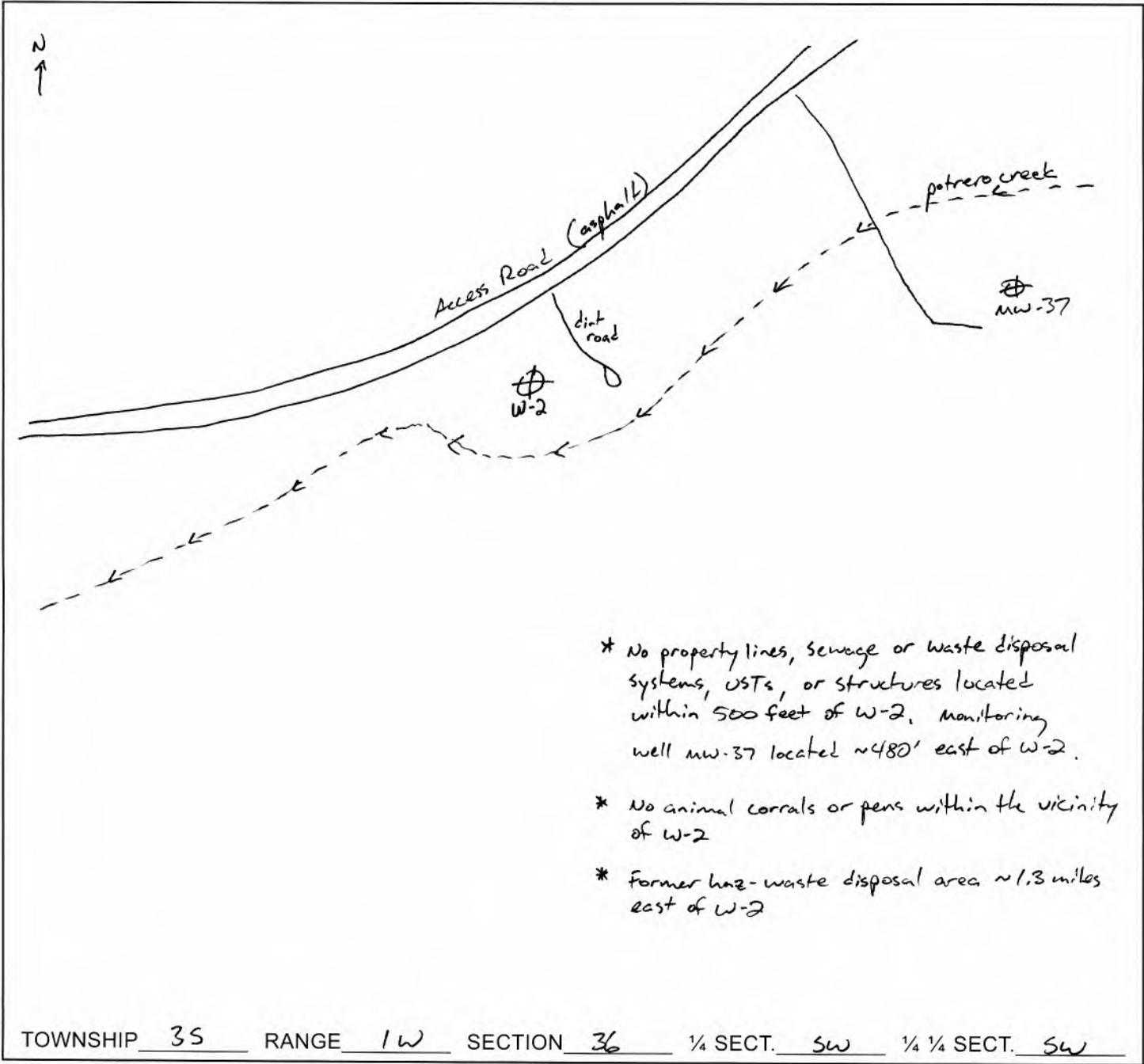
COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

OWNER'S NAME: Lodcheed Martin Corporation
SITE: Beaumont Site #1
CITY: Beaumont, CA
ASSESSOR'S P.M. NO.: 430-040-017

Well: W-2

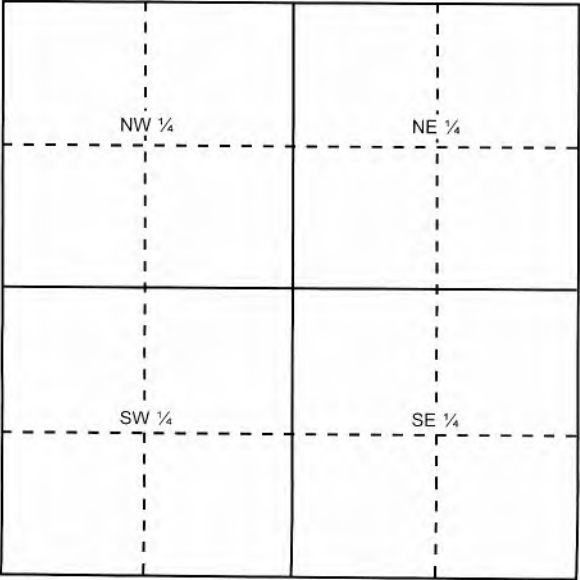
Department Use Only
PERMIT NO. _____

North



NOTE: Please see reverse side for information which must be shown on this Plot plan in order to process this permit application.

SECTION MAP



VICINITY MAP

ATTACHMENT NO. 1

(FOR WELL PERMIT PLOT PLAN)

1. The Plot Plan shall show the proposed well location with respect to the following items which a radius of five-hundred feet (500') from the well;
 - a. Property lines, including ownership.
 - b. Sewage or waste disposal systems, (including reserved waste disposal expansion areas), or works for carrying or containing sewage or waste.
 - c. Location of underground storage tank(s).
 - d. All intermittent or perennial, natural, or artificial bodies of water or watercourses.
 - e. The approximate drainage pattern of the property.
 - f. Other wells, including abandoned wells.

NOTE: All abandoned wells on this property must be properly destroyed before a new well permit can be issued.

 - g. Access road(s) to the well site.
 - h. Structures.
2. Location of the property on a vicinity map including the legal description of the property (Assessor's Parcel Map/Tract Map Number).
3. Location and classification by visual inspection of any solid, liquid, or hazardous waste disposal sites to include municipal and individual package sewage treatment plants within two-thousand (2,000') feet of the proposed well.
4. Animal corrals and pens.
5. Other information that has been requested by the Health Department to determine if the underground waters will be adequately protected.

This space to be used to describe reconstruction or destruction method used:

Well W-2

Because of the endangered species Stephen's kangaroo rat (SKR) in high density around the well location, and the soil type of the area around the well, vehicle access to the well for well destruction is not possible. Due to the SKR concerns and resultant access problems, the well will be destroyed by filling with grout using a 10-sack sand slurry without perforating the casing. The grout will be conveyed to the well using a concrete truck and pump parked on the road with a hose running to the well without the use of a tremie pipe. The hose will be lowered to 20 feet below ground surface in the well with the hose lifted slowly from the well as the concrete fills the casing. The grout will be pumped at a slow rate to prevent bridging in the lower casing. The amount of pumped concrete will be compared against the calculated volume of the casing to ensure the entire well casing volume has been filled. Because of the SKR located around the well excavation of the well surface completion will not be possible. The well surface completion will be left in place and the well will be grouted as described above to the top of the casing.

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

28228

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT
FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.

Date January 15, 2004

Expiration Date 7-8-04

Fee \$153.27
(non-refundable)

This permit is granted on condition that the person named in the permit will comply with the laws, ordinances and regulations that are now or may hereafter be in force.

LOCATION OF PROPOSED WELL SW $\frac{1}{4}$ SW $\frac{1}{4}$; Sec. 31; T 4S; R 1W

PHYSICAL ADDRESS OF WELL Beaumont Site #1 Community Beaumont

APN: 430-040-017

Well: W-5

NAME Lockheed Martin Corporation

DRILLER

Water Development Corporation
5566 Arrow Highway
Montclair, Ca. 91763

MAILING ADDRESS 2550 N. Hollywood Way, 3rd Floor

CITY & STATE Burbank, Ca. 91505

ABANDONMENT

By Charlene Robbins
Charlene Robbins

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WELL PERMIT APPLICATION
(For Construction, Reconstruction & Destruction)

- ☐ 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980
☐ 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000
☒ 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180

Well: **W-5**

PLEASE REPLY TO ADDRESS CHECKED ABOVE

Englrs CK #0578
NOTE: Any abandoned wells on the property must be properly destroyed before an application for construction or reconstruction can be processed.

Please Print

consultant check 0578

FOR DEPARTMENT USE ONLY

Permit No. **28228**

Expiration **7/8/04**

1. OWNER: Name **Lockheed Martin Corporation**
Mailing Address **2550 N. Hollywood Way, 3rd Floor**
City **Burbank** State **CA**
Zip **91505** Phone No. **(818) 847-0899**

2. DATE OF WORK (approximate):

Start _____ Complete _____

3. WELL DRILLER

Name **Water Development Corp**

Riv. Co. Registration No. _____

C-57 License No. _____

4. WELL CHECK (check)

- ☐ Community ☐ Monitoring ☐ Industrial
☒ Individual ☐ Cathodic ☐ Other
☐ Agricultural ☐ Horizontal

4A. FOR MONITORING WELL: (Name of Consultant)

Name **Tetra Tech INC** Phone **381-1474**

5. TYPE OF WORK (check)

- ☐ New ☐ Reconstruction ☒ Destruction

5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.

6. ANNUAL SEAL:

Depth _____ ft.

Borehole Diam. _____ in.

Conductor Diam. _____ in.

Annular Thickness _____ in.

Sealing Material _____

7. DEPTH OF WELL (feet)

Proposed _____ Existing **128'**

DIAMETER OF BORE (in.) **~ 6-8"**

8. PRODUCTION WELL CASING INSTALLED:

- ☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	128	6	

GRAVEL PACK: ☐ Yes ☐ No **Unknown**

From _____ to _____ ft.

Type of rig _____

9. PERFORATIONS (if applicable):

From **60** to **128** ft.

10. SEALED ZONES (if applicable):

From _____ to _____ ft.

11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: **I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California.**

Driller's Signature **NA** Date _____

11B. I have read this application and agree to comply with all laws regulating the type of work being performed.

Driller's Signature **[Signature]** Date **11/17/03**

12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application.

Property Owner's Signature **Jude Gertler for Lockheed Martin Corp.** Date **11-15-03**

DISPOSITION OF PERMIT

Approved subject to the following:

FOR DEPARTMENT USE ONLY

- A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations:
- ☐ Prior to sealing of the annular space or filling of the conductor casing.
 - ☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.
 - ☐ After installation of the surface protective slab and pumping equipment.
 - ☒ During destruction of wells, prior to pouring the sealing material.

B. Approved Plot Plan.

- C. Submit to the Department within thirty (60) days after completion of work, a copy of:
- ☒ Water Well Driller's Report (DWR 188).

NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.

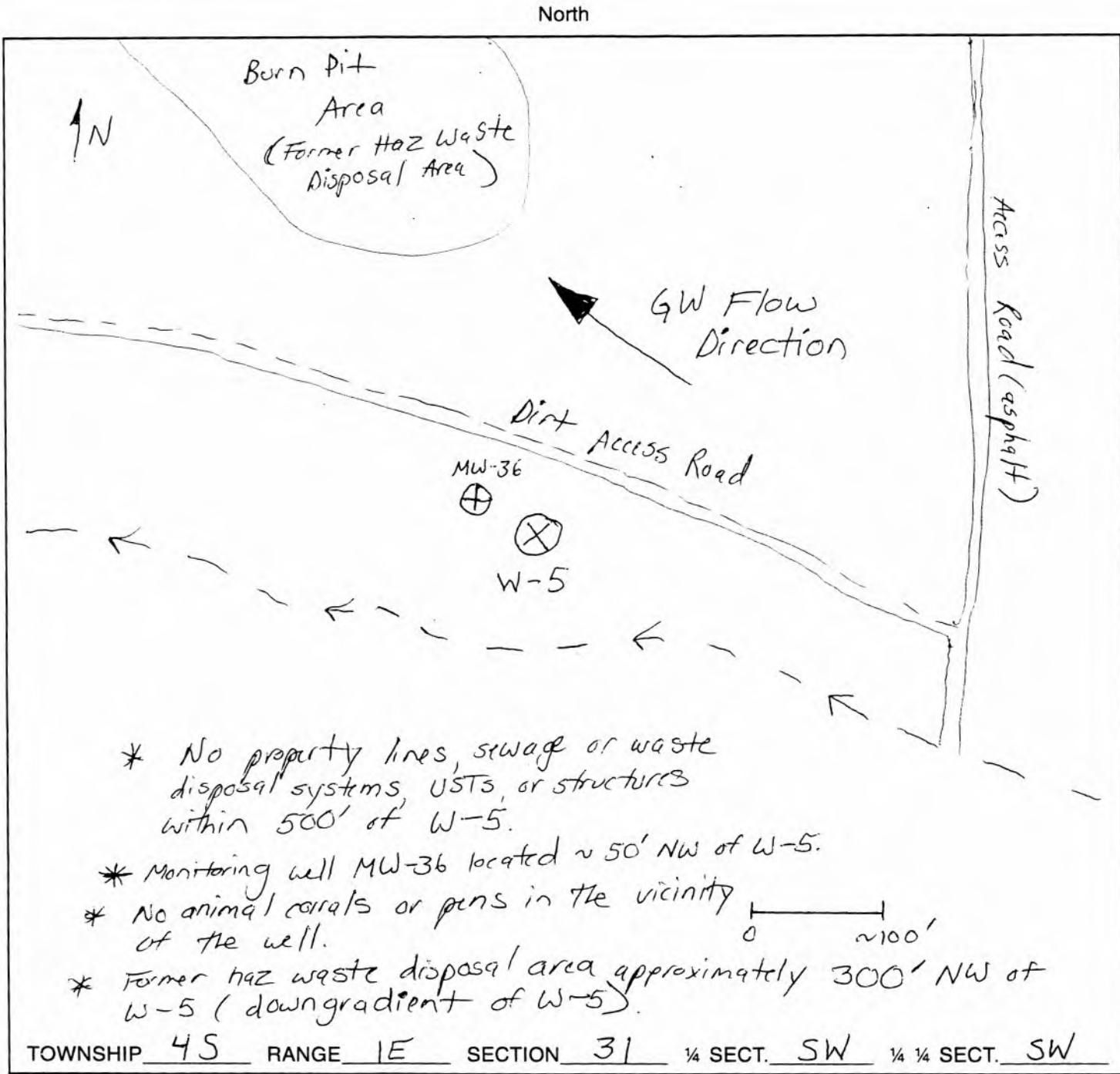
D. Other: _____

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
 DEPARTMENT OF ENVIRONMENTAL HEALTH

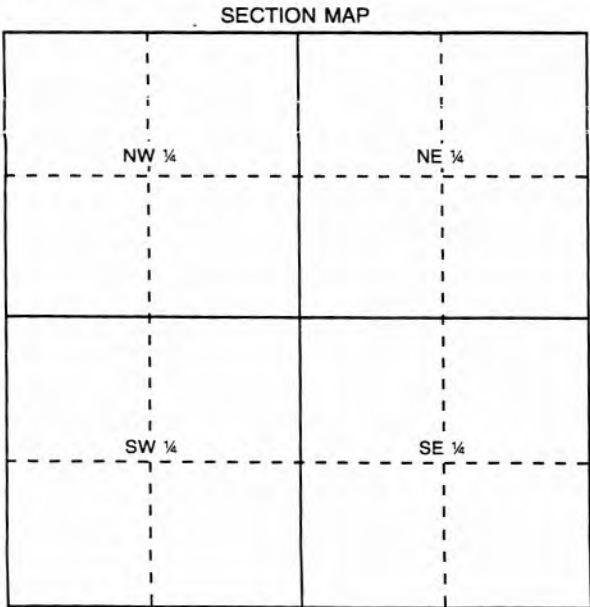
Well: W-5

OWNER'S NAME: Lockheed Martin Corporation
 SITE: Beaumont Site #1
 CITY: Beaumont, CA
 ASSESSOR'S P.M. NO.: 430-040-017

Department Use Only
 PERMIT NO. _____



NOTE: Please see reverse side for information which must be shown on this Plot plan in order to process this permit application.



VICINITY MAP

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

30827

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT
FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.

Date September 16, 2005

Expiration Date 3-14-06

Fee \$154.02
(non-refundable)

This permit is granted on condition that the person named in the permit will comply with the laws, ordinances and regulations that are now or may hereafter be in force.

LOCATION OF PROPOSED WELL _____ 1/4 _____ 1/4; Sec. 31; T 3S; R 1W

PHYSICAL ADDRESS OF WELL 17255 Highland Springs Rd Community Beaumont

APN: 421-250-005-5

Well: W-5

NAME Lockheed Martin Corporation

DRILLER

J & H Drilling Co. Inc.

1014 E. South Street

MAILING ADDRESS 2550 N. Hollywood Way, 3rd Floor

Anaheim, CA 92805

CITY & STATE
Burbank, CA 91505

By Charlene Robbins

Charlene Robbins

ABANDONMENT

Form SH-1-025 (Rev. 10/02)

Distribution: WHITE—Environmental Health Department; YELLOW—Owner; PINK—Well Driller; GOLDENROD—Flood Control

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WELL PERMIT APPLICATION
(For Construction, Reconstruction & Destruction)

- ☒ 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980
☐ 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000
☐ 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180

PLEASE REPLY TO ADDRESS CHECKED ABOVE

NOTE: Any abandoned wells on the property must be properly destroyed before an application for construction or reconstruction can be processed.

Please Print

1. OWNER: Name Lodeheed Martin Corporation
Mailing Address 2550 N. Hollywood Way, 3rd Floor
City Burbank State CA
Zip 91505 Phone No. (818) 847-0899

2. DATE OF WORK (approximate):
Start Sept 23, 2005 Complete Sept 23, 2005

3. WELL DRILLER
Name JFH DRILLING CO INC
Riv. Co. Registration No. WOR 04-090
C-57 License No. 740854 05

4. WELL CHECK (check) W-5
☐ Community ☐ Monitoring ☐ Industrial
☒ Individual ☐ Cathodic ☐ Other
☐ Agricultural ☐ Horizontal

4A. FOR MONITORING WELL: (Name of Consultant)
Name Tetra Tech Phone (909) 381-1674

5. TYPE OF WORK (check)
☐ New ☐ Reconstruction ☒ Destruction

5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.

6. ANNUAL SEAL:
Depth _____ ft.
Borehole Diam. _____ in.
Conductor Diam. _____ in.
Annular Thickness _____ in.
Sealing Material _____

7. DEPTH OF WELL (feet)
Proposed _____ Existing 128'
DIAMETER OF BORE (in.) ~6-8"

8. PRODUCTION WELL CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	128	6	10

GRAVEL PACK: ☐ Yes ☐ No unknown
From _____ to _____ ft.

Type of rig _____

9. PERFORATIONS (if applicable):
From 60 to 128 ft.

10. SEALED ZONES (if applicable):
From _____ to _____ ft.

11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California.

Driller's Signature _____ Date _____

11B. I have read this application and agree to comply with all laws regulating the type of work being performed.

Driller's Signature BRIAN HOLLEN PRES Date 9/7/05

12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application.

Property Owner's Signature For LMC Thomas J. Vilk Date 9-7-05

DISPOSITION OF PERMIT

Approved subject to the following:

FOR DEPARTMENT USE ONLY

- A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations:
☐ Prior to sealing of the annular space or filling of the conductor casing.
☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.
☐ After installation of the surface protective slab and pumping equipment.
→ ☒ During destruction of wells, prior to pouring the sealing material.
- B. Approved Plot Plan.
- C. Submit to the Department within thirty (60) days after completion of work, a copy of:
→ ☒ Water Well Driller's Report (DWR 188).

NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.

D. Other: _____

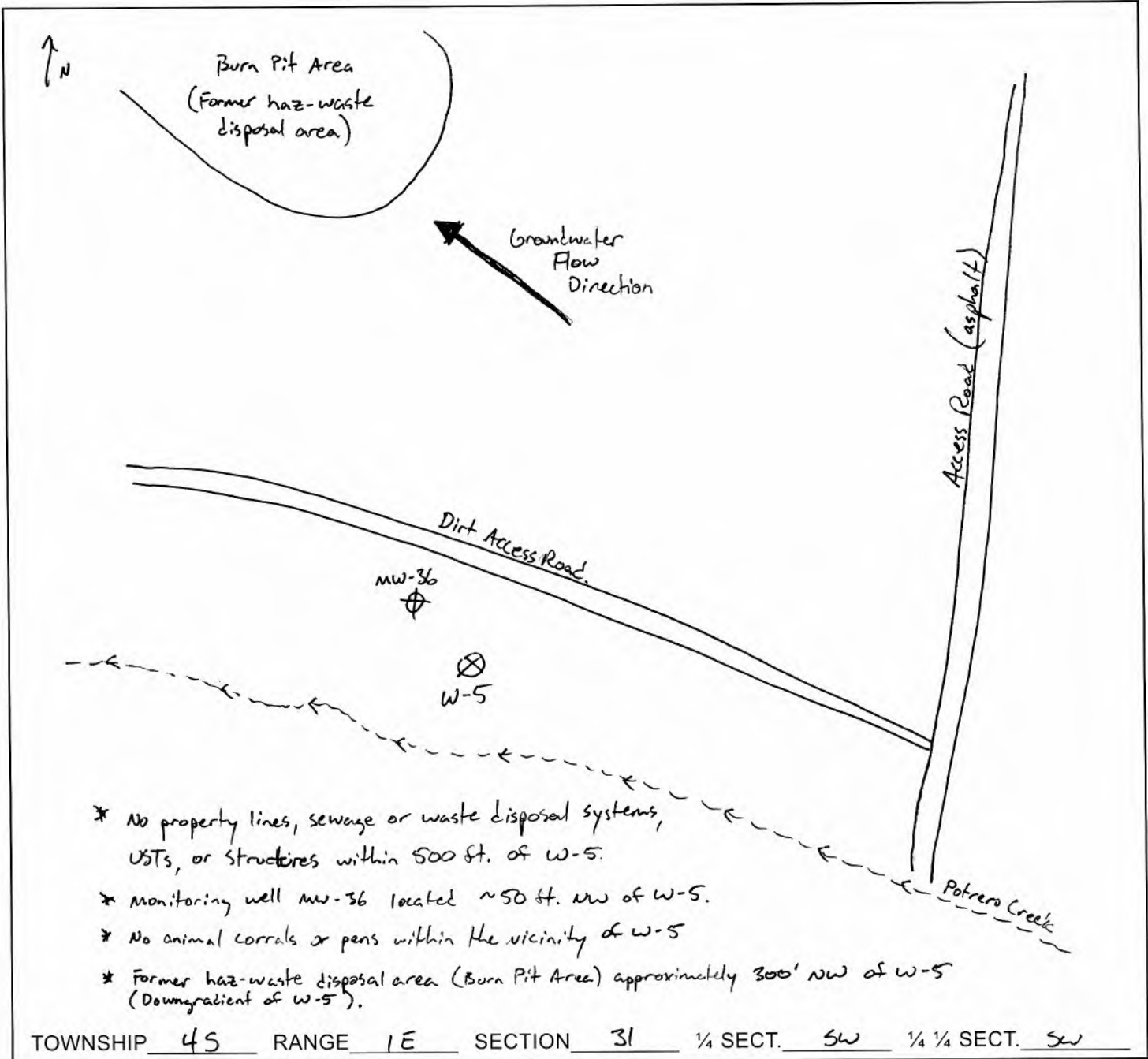
COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH

OWNER'S NAME: Lockheed Martin Corporation
SITE: Beaumont Site #1
CITY: Beaumont, CA
ASSESSOR'S P.M. NO.: 430-040-017

Well: W-5

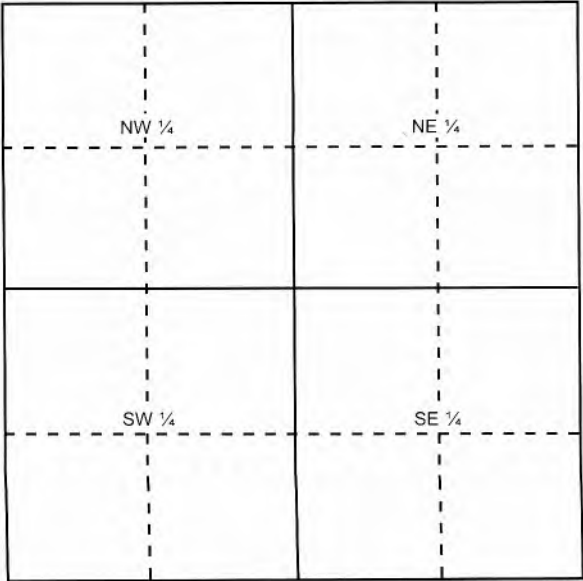
Department Use Only
PERMIT NO. _____

North



NOTE: Please see reverse side for information which must be shown on this Plot plan in order to process this permit application.

SECTION MAP



VICINITY MAP

ATTACHMENT NO. 1
(FOR WELL PERMIT PLOT PLAN)

1. The Plot Plan shall show the proposed well location with respect to the following items which a radius of five-hundred feet (500') from the well;
 - a. Property lines, including ownership.
 - b. Sewage or waste disposal systems, (including reserved waste disposal expansion areas), or works for carrying or containing sewage or waste.
 - c. Location of underground storage tank(s).
 - d. All intermittent or perennial, natural, or artificial bodies of water or watercourses.
 - e. The approximate drainage pattern of the property.
 - f. Other wells, including abandoned wells.

NOTE: All abandoned wells on this property must be properly destroyed before a new well permit can be issued.

 - g. Access road(s) to the well site.
 - h. Structures.
2. Location of the property on a vicinity map including the legal description of the property (Assessor's Parcel Map/Tract Map Number).
3. Location and classification by visual inspection of any solid, liquid, or hazardous waste disposal sites to include municipal and individual package sewage treatment plants within two-thousand (2,000') feet of the proposed well.
4. Animal corrals and pens.
5. Other information that has been requested by the Health Department to determine if the underground waters will be adequately protected.

This space to be used to describe reconstruction or ~~destruction~~ method used:

Well W-5

Because of the endangered species Stephen's kangaroo rat (SKR) in high density around the well location and the soil type of the area around the well vehicle access to the well for well destruction is limited. Due to the SKR concerns and resultant access problems, as well as well casing current condition, the well will be destroyed by filling with grout from the bottom of the well using a 10-sack sand slurry without perforating the casing. The grout will be pumped into the well using a tremie pipe lowered to the bottom of the well. The grout will be pumped at a slow rate to prevent bridging in the lower casing. The amount of pumped concrete will be compared against the calculated volume of the casing to ensure the entire well casing volume has been filled. Because of the SKR located around the well excavation of the well surface completion will not be possible. The well surface completion will be left in place and the well will be grouted as described above to the top of the casing.

Riverside County LMS SET: HW050846

Receipt Number:R0519023 Amount: 462.06 09/15/05 16:13
Payment Method:CK Notation: 0666 Init: CY

Set Members:
EHW050846 154.02 EHW050847 154.02
EHW050848 154.02

Account Code	Description	Paid
100004200420774830	ENVH: WELL PERMIT FEES	453.00
202033100200772210	ENVH: LMS SURCHARGE FEES	9.06

Total fee Payments: 462.06

Attachment 3
DWR Well Completion Reports

TRIPLICATE
Owner's Copy

Page 1 of 1

Owner's Well No. Well #1

Date Work Began 9/7/2005, Ended 10/14/2005

Local Permit Agency Riverside D. E. H.

Permit No. 308-25

Permit Date 9/19/2005

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **e016904**

DWR USE ONLY — DO NOT FILL IN	
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG

WELL OWNER

ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE ☐ (SPECIFY)

Name **Lockheed Martin Corporation**

Mailing Address **6901 Rockledge Dr.**

Bethesda

MD

20817

CITY

STATE

ZIP

WELL LOCATION

Address **Highland Springs Rd.**

City **Beaumont CA**

County **Riverside**

APN Book **430** Page **040** Parcel **017**

Township **3 S** Range **1 W** Section **36**

Latitude **33 51 23 N**

116 57 44 W

DEG. MIN. SEC.

DEG. MIN. SEC.

LOCATION SKETCH

ACTIVITY (✓)

NORTH

NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify)

☒ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY

Domestic

Imigation

Public

Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDICATION

OTHER (SPECIFY)

WEST

EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER **23** (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL **23** (Ft.) & DATE MEASURED **9/19/2005**

ESTIMATED YIELD * (GPM) & TEST TYPE

TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)

May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING **390** (Feet)

TOTAL DEPTH OF COMPLETED WELL **388** (Feet)

DEPTH FROM SURFACE		BORE-HOLE DIA. (Inches)	CASING (S)					ANNULAR MATERIAL					
Ft.	to Ft.		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	DEPTH FROM SURFACE	TYPE	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	210	16	✓	STEEL	14	.250	0	0	20	✓			
210	388	16		STEEL	14	.250	.250						

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- ☒ Other **map and photo**

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **J. & H. Drilling Co., Inc.**

(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

1014 E. South St.

ADDRESS

Anaheim

CITY

CA

STATE

92805-5348

ZIP

Signed

BRAND L. Hovien, PLS/RMO

WELL DRILLER/AUTHORIZED REPRESENTATIVE

10/27/05

DATE SIGNED

740854

C-57 LICENSE NUMBER

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

Page 1 of 1

Owner's Well No. Well #5

Date Work Began 9/7/2005, Ended 10/14/2005

Local Permit Agency Riverside Co. D. E. H.

Permit No. 308-27

Permit Date 9/19/2005

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. **e016906**

DWR USE ONLY — DO NOT FILL IN	
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

GEOLOGIC LOG			WELL OWNER	
ORIENTATION (✓) <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE (SPECIFY)	DRILLING METHOD CABLE	FLUID	Name Lockheed Martin Corporation	
DEPTH FROM SURFACE	DESCRIPTION		Mailing Address 6901 Rockledge Dr.	MD 20817
Fl. to Fl.	Describe material, grain, size, color, etc.		CITY Bethesda	STATE MD ZIP 20817
	This well was located in a Federally protected Endangered Species Zone (Stephen's Kangaroo Rat {SKR}). Television inspection revealed horizontal seams ea. 3ft throughout the well and riveted stove pipe casing. Mills knife perforations began at 60' BGS continuing to the bottom at 127.5' BGS. During low water periods water cascaded from perfs at 90' to a SWL at 91' BGS. SWL in Sept. of 2005 was noted at 65.5' with a soft bottom at 126' BGS. Protective matting was laid to allow access by rig and 3" tremie pipe was set to 123' BGS. Well casing volume was 3.2 cu yds and 5.5 cu yds of 10 sack pumpable grout were accepted. Upon reaching the surface, grout began oozing from the surrounding ground. App. 2.3 cubic yards of annular space was filled with grout. The grout was allowed to set, the above ground casing was trimmed to 1 ft above ground surface and a steel cover was welded to the well casing. The cover will be stamped dating the destruction date and method.		WELL LOCATION	
			Address Highland Springs Rd	
			City Beaumont CA	
			County Riverside	
			APN Book 430 Page 040 Parcel 017	
			Township 3 S Range 1 W Section 36	
			Latitude 33 51 27 N 116 55 36 W	
			DEG. MIN. SEC. DEG. MIN. SEC.	
			LOCATION SKETCH	
			NORTH	
			WEST	
			EAST	
			SOUTH	
			Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	
			ACTIVITY (✓)	
			<input type="checkbox"/> NEW WELL	
			MODIFICATION/REPAIR	
			<input type="checkbox"/> Deepen	
			<input type="checkbox"/> Other (Specify)	
			<input checked="" type="checkbox"/> DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")	
			PLANNED USES (✓)	
			WATER SUPPLY	
			<input type="checkbox"/> Domestic <input type="checkbox"/> Public	
			<input type="checkbox"/> Irrigation <input checked="" type="checkbox"/> Industrial	
			MONITORING <input type="checkbox"/>	
			TEST WELL <input type="checkbox"/>	
			CATHODIC PROTECTION <input type="checkbox"/>	
			HEAT EXCHANGE <input type="checkbox"/>	
			DIRECT PUSH <input type="checkbox"/>	
			INJECTION <input type="checkbox"/>	
			VAPOR EXTRACTION <input type="checkbox"/>	
			SPARGING <input type="checkbox"/>	
			REMEDIATION <input type="checkbox"/>	
			OTHER (SPECIFY) <input type="checkbox"/>	
TOTAL DEPTH OF BORING 127.5 (Feet)			WATER LEVEL & YIELD OF COMPLETED WELL	
TOTAL DEPTH OF COMPLETED WELL 127.5 (Feet)			DEPTH TO FIRST WATER (Ft.) BELOW SURFACE	
			DEPTH OF STATIC WATER LEVEL 65.5 (Ft.) & DATE MEASURED 9/19/2005	
			ESTIMATED YIELD * (GPM) & TEST TYPE	
			TEST LENGTH (Hrs.) TOTAL DRAWDOWN (Ft.)	
			May not be representative of a well's long-term yield.	

DEPTH FROM SURFACE			BORE - HOLE DIA. (Inches)	CASING (S)							DEPTH FROM SURFACE			ANNULAR MATERIAL						
				TYPE (✓)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS				SLOT SIZE IF ANY (Inches)	TYPE					
Ft.	to	Ft.		BLANK	SCREEN	CON- DUCTOR	FILL PIPE				CE- MENT (✓)	BEN- TONITE (✓)	FILL (✓)		FILTER PACK (TYPE/SIZE)					
0	20	20			✓		STEEL	16	.250					0	20	✓				none
0	60	12	✓				STEEL	12	.125											
60	127.5	12		✓			STEEL	12	.125	Mills Knife										

ATTACHMENTS (✓)	CERTIFICATION STATEMENT
<input type="checkbox"/> Geologic Log	I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
<input type="checkbox"/> Well Construction Diagram	NAME J. & H. Drilling Co., Inc.
<input type="checkbox"/> Geophysical Log(s)	(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
<input type="checkbox"/> Soil/Water Chemical Analysis	1014 E. South St. Anaheim CA 92805-5348
<input checked="" type="checkbox"/> Other map and photo	ADDRESS
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	Signed BRANDL HOEN, PRES. RMO CITY
	DATE SIGNED 10/27/05 STATE CA ZIP 92805
	WELL DRILLER/AUTHORIZED REPRESENTATIVE C-57 LICENSE NUMBER

Attachment 4

Photographs

Destruction of three idle production wells (W-1-1, W-1-2, and W-1-5)



Photo 1: Preparing Well W-1-1 for abandonment. Pump and piping removed from well, casing extension to capture displaced water installed, and tremmie pipe lowered into well to pump in grout.



Photo 2: Well abandonment process at Well W-1-1



Photo 3: Well W-1-1 after abandonment completion



Photo 4: Well W-1-2 being abandoned by pressure grouting. Well is fitted with a pressure cap and grout is pumped under pressure into well casing and annular space.



Photo 5: Well W-1-2 being abandoned by pressure grouting. Excessive SKR burrows and surrounding soil type prevented vehicular access to the well location to abandon using tremmie pipe.



Photo 6: Grout pressure maintained after pumping Well W-1-2 casing and annular space full of grout



Photo 7: Well W-1-2 after completion of well abandonment.



Photo 8: Preparation of Well W-1-5 for abandonment: Fitment of casing extension to capture displaced water during grout filling.



Photo 9: Preparation of Well W-1-5 for abandonment: Placement of tremmie pipe in well to pump in sealing grout.



Photo 10: Well W-1-5 abandonment process proceeding.



Photo 11: Well W-1-5 after completion of well abandonment.