APPENDIX D

Biological Survey and Certified Biological Representative Program

LOST HILLS CHEVRON BIOLOGICAL SURVEY AND HABITAT IMPACT REVIEW FORM

SURVEY INFORMATION

Prepared for: Mike Plowman Date: 2-18-10 Time: 9:00am

Field/Area: Lost Hills Lease/Property: Lost Hills ☒Fee ☐Federal

GPS: Reference: WGS 84 Zone 11 CON US

Section/T/R(s): Section 29 / T 26S / R 21E Weather: Sunny, cool, hazy

Project Location and Description: **Lost Hills 29 Generator Site.** Project consists of the construction of a new generator site and road widening. Habitat estimates for road widening were based on five feet of additional road clearance on each side of existing roadways. *See Attachment*

ZONE: ☐ RED ☒ GREEN ☐ WHITE

	Project Footprint Sq. ft. / acres	A Undisturbed Habitat	B Recovering Habitat	C Not Habitat or Significantly Disturbed	Habitat Impact Calculation (A x 1.0) + (B x 0.5) + (C x 0)	Total Calculated Impact
Permanent	3.25	3.05	0.00	0.02	3.05+0.00+0.00	3.05
Temporary	0.00	0.00	0.00	0.00	0.00	0.00

The conversion factor is 1 acre = 43,560 sq. ft. Use either acres or sq. ft.

SURVEY METHOD

☒ Pads or locations – Impact area plus 200' buffer with transects spaced at: 50ft.

☒ Linear projects – Centerline plus corridor to either side out to: ft.

☐ Other; describe:

☐ All sensitive burrows/dens were marked with:

TOPOGRAPHY

☒ Flat Terrain ☐ Rolling Hills ☐ Floodplain ☐ Steep Hills ☐ Potential CDFG Streambed

Comments (include elevation if known, and amount of existing disturbance): The proposed project area is located within a low to moderate density oil and gas field, approximately 400' in elevation.

VEGETATION OBSERVED AT PROJECT SITE

☐ Non-Native Grassland ☐ Alkali Sink Scrub ☒ Saltbush Scrub ☐ Ruderal ☐ Riparian (stream)

Dominant shrub layer (trees, bushes): *Atriplex polycarpa*

Dominant herb layer: *Bromus madritensis* ssp. *rubens*

Sensitive Plants: ☒None Observed ☐ California Jewelflower ☐ San Joaquin Woolly-Threads ☐ Hoover's Woolly-Star ☐ *Other Sensitive Plants:*

Was survey performed at appropriate time for detection of sensitive annual plants? ☐ Yes ☒No

Plants Comments: Sensitive plant species are not anticipated to be present within the project area.

WILDLIFE HABITAT AND/OR SIGN OBSERVED AT PROJECT SITE

☒ None Observed ☐ San Joaquin Kit Fox ☐ Blunt-Nosed Leopard Lizard ☐ Tipton Kangaroo Rat ☐ Giant Kangaroo Rat ☐ San Joaquin Antelope Squirrel ☐ Burrowing Owl ☐ Other (describe below)

Wildlife Comments:

- Sensitive wildlife species were not observed during the survey
- Based on the lack of small mammal burrows within the project site and roadway edges, and the lack of BNLL observations in the project area during previous CDFG protocol BNLL surveys, impacts to this species are not anticipated.

SURVEY RESULTS

☒ The project **should not** result in direct impacts to threatened or endangered species provided that standard Chevron precautionary measures are implemented along with the specific directions listed below in the comments section.

☐ Additional survey and/or follow-up is required; Follow-up results completed by a Qualified Biologist must be attached prior to proceeding with project.

Were any modifications made to project as a result of this survey? ☐ Yes ☒ No

Survey Comments: If more than 30 days pass between the survey date and project commencement, a pre-activity survey should be conducted.

FOLLOW-UP SURVEY

Target Species/ Issues: Timeframe:

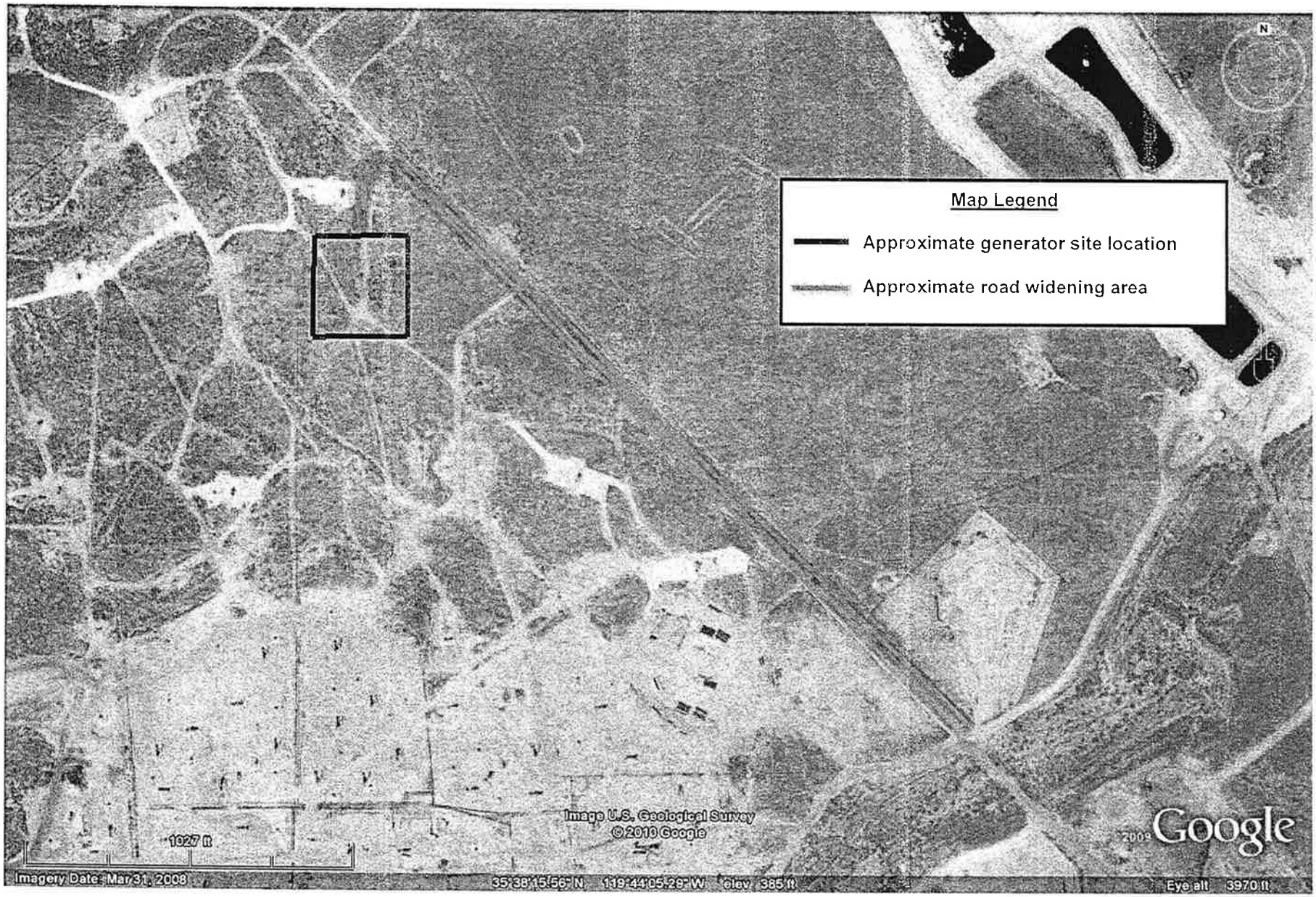
Surveyor Name: Kacy O'Malley Company: McCormick Biological, Inc. Date: 3-4-10

FORM DISTRIBUTION:

☒ *Copy to Area HES Attn: Galon Gordon ('galongordon@chevron.com')* ☒ *HES BU Staff - 9525 Camino Media Brad Noblitt (NOBB@chevron.com)* ☒ *Other:*

Rev. 10/06

Section 29, T 26S., R. 21E., M. D. B. & M.



Attachment 1: Lost Hills 29 Generator Site Location Map

CERTIFIED BIOLOGICAL REPRESENTATIVE PROGRAM

Chevron Threatened and Endangered Species Compliance Program Information

CERTIFIED BIOLOGICAL REPRESENTATIVE PROGRAM

Federal and State Endangered Species Acts require that:

1. Chevron conduct its operations to ensure that no "take" of endangered species occurs as a result of our operations, and that
2. We minimize and where required mitigate or compensate for the impacts our operations may have on Threatened and Endangered Species habitat.

To facilitate compliance with these requirements, we have developed the Certified Biological Representative (CBR) Program. The program is designed to train Chevron personnel and Business Partners as appropriate to evaluate, direct mitigation, and track required compensation for impacts from our operations.

> For example: say we are planning to drill a well from a new well pad location. A CBR would be called out before any work takes place to survey the site, evaluate if the planned work would impact T&E Species or their habitat, and document the acreage of habitat that will be disturbed. If sensitive biological resources or rare plants may be impacted, the CBR will request the assistance of a qualified biologist to ensure that our planned operations will not result in "take" of an endangered species.

The goals of the Chevron Certified Biological Representative (CBR) Certification Program are as follows:

- To establish a pool of both Chevron technical staff, appropriate business partners and/or qualified biologists capable of effectively evaluating potential impacts from our operations, and
- To train and certify CBRs to conduct biological wildlife resource screening of proposed project locations

CBRs attend initial training led by a qualified biologist, consisting of 4hours of class room work followed by 4 hours of in-field training. CBRs are then mentored by experienced qualified biologists or CBRs. Surveys prepared by CBRs are reviewed for completeness, content, and consistency. Internal audits of surveys are completed annually. Training includes:

- Chevron's policies, practices, processes and compliance strategies
- State and Federal agency laws, regulations, requirements and practices
- Long range planning - HCPs
- Chevron's Role and Responsibility
- Responsibilities for employees, business partners, CBRs and HES staff
- CBR Program Goals
- Streambed alteration notification process
- Migratory Bird Treaty Act compliance
- Incidental Take – Avoidance and Mitigation Standards
- Habitat Type Review – Light vs. Medium/Heavy Disturbance areas – When to contact a qualified biologist
- Species of Concern: protection status, identification, behaviors, sign, distribution, avoidance and mitigation strategies
- Recognition of potential impact situations and lessons learned
- Population shifts and changes
- CBR and Qualified Biologist Survey Protocols
- Do's and Don'ts

CBRs are authorized to conduct pre-construction biological surveys only in areas where there is existing moderate to heavy habitat disturbance. In areas that have not previously been disturbed, business partner

qualified biologists will be asked to perform surveys. Project planning surveys are conducted by qualified biologists to determine need for full and seasonally appropriate surveys for identified sensitive species.

All CBRs are required to attend a ½ day field refresher each year. Refreshers typically include a review of the survey protocol, species identification and focus on a particular issue such as sensitive plants, common plants, identification of sign (scat, tracks, dens) etc..

Pre-Construction Screening Survey Protocol and Form

Purpose: The purpose of this survey protocol is to:

- identify the presence or sign of wildlife and plant life, particularly identified sensitive, or threatened and endangered species,
- ensure that disturbance of habitat is minimized,
- identify location or orientation alternatives to proposed project based on actual site features
- ensure that streambed setbacks are observed, and trigger application for a streambed alteration notification if necessary,
- accurately quantify the amount and type of habitat to be permanently or temporarily disturbed,
- determine what site specific mitigation measure are needed, and
- provide site specific information to be discussed in pre-construction site orientations.

Use: This survey protocol shall be used to evaluate the species and habitat impacts of any activity which will result in disturbance of soil or the grubbing of plant life. The survey shall be administered by:

Certified Biological Representatives – in areas having moderate or heavy previous disturbance within the productive area of the oilfield.

Qualified Biologists – in areas having light or no previous disturbance, areas outside of the productive zone of the oilfield, or areas where sufficient historical information is not available on the presence of sensitive species.

Note: This protocol is not intended to be used to evaluate potential impacts for large construction or development projects. Such projects should be subjected to full biological surveys according to accepted protocols, in season, and performed by Qualified Biologists. Subsequent pre-construction surveys associated with implementing such projects however, can be performed by CBRs.

Form to be Used: The attached form shall be used to document the results and specify any follow-up surveys required. Completion of survey forms will be monitored to ensure that accurate, consistent, effective and sufficient data is being collected.

How to Conduct a Screening Survey

⇒ Be aware of which sensitive or T&E species may be present in the project location, what habitat types are represented

⇒ Determine the size of the proposed project disturbance

⇒ Survey the disturbance area plus 150 to 200 foot buffer area. Linear projects should be walked with transects out to sides at appropriate intervals.

⇒ Walk approximately 50 foot belt transects to cover the entire area including the buffer area

⇒ Take notes of what you see on the survey form

⇒ Note any wildlife or evidence of wildlife, such as burrows, patterns of burrows, scat, tail drags, or digging.

⇒ Note whether or not the survey is being performed during the proper season for sensitive plant life

⇒ Note if the habitat is appropriate for T&E species such as blunt-nosed leopard lizard. Pay particular attention to riparian habitat. If riparian habitat will be impacted, contact a qualified biologist for assistance.

⇒ Note SJKF potential dens, known dens or pupping dens as appropriate. If any of these are present, a qualified biologist should perform a follow-up survey.

⇒ If any sensitive biological resources are identified, note if they can be avoided by use of appropriate buffer distance.

Recommended Buffer Distances		
San Joaquin Kit Fox Dens:	Pupping dens (unoccupied)	200 feet
	Known	100 feet
	Potential	50 feet
Giant Kangaroo Rat Burrows		100 feet
Tipton Kangaroo Rat Burrows		50 feet
San Joaquin Antelope Squirrel Burrows		50 feet
Other sensitive species		50 feet
Avian species	Can vary depending on proposed activity, sensitivity of species, and nesting season	

⇒ Buffer zones should be constructed of stakes and flagging or similar material sufficient to exclude vehicle traffic and other project related activities.

Species Specific Notes

Bakersfield Cactus: If a population of Bakersfield Cactus is noted near project, ensure that cactus is protected and effective barriers are installed to prohibit disturbance.

Birds: Note any active nests – Active nest are nest that have eggs, or young. Check trees, power poles, shrubbery and even the ground for nests. Listen for calls or song. If the project will require removal of an active nest, you will need to wait for the young to fledge (be able to fly). For most songbirds, this can take up to 4 weeks from laying to fledging. Contact a qualified biologist for assistance. Be aware that the project could impact the nesting of raptors up to ¼ of a mile away or more.

Blunt nosed leopard lizard – Be aware of whether or not BNLL is anticipated to be present in the area of the project. If the area has a known population, or if during the survey it is determined that the habitat in the general vicinity of the project is good BNLL territory (washes, saltbush with significant open areas), or you note BNLL scat outside burrows, contact a qualified biologist for a follow-up survey.

Elderberry Bushes – If elderberry bushes are located within the footprint of the project, and the project can not be reoriented or relocated, contact a qualified biologist for assistance.

Small Mammals – Be aware if Giant Kangaroo Rats or Tipton Kangaroo Rats are anticipated in the area of the project. If typical patterns of properly sized burrows are evident contact a qualified biologist for a follow-up survey. Listen and watch for Antelope Ground Squirrel.

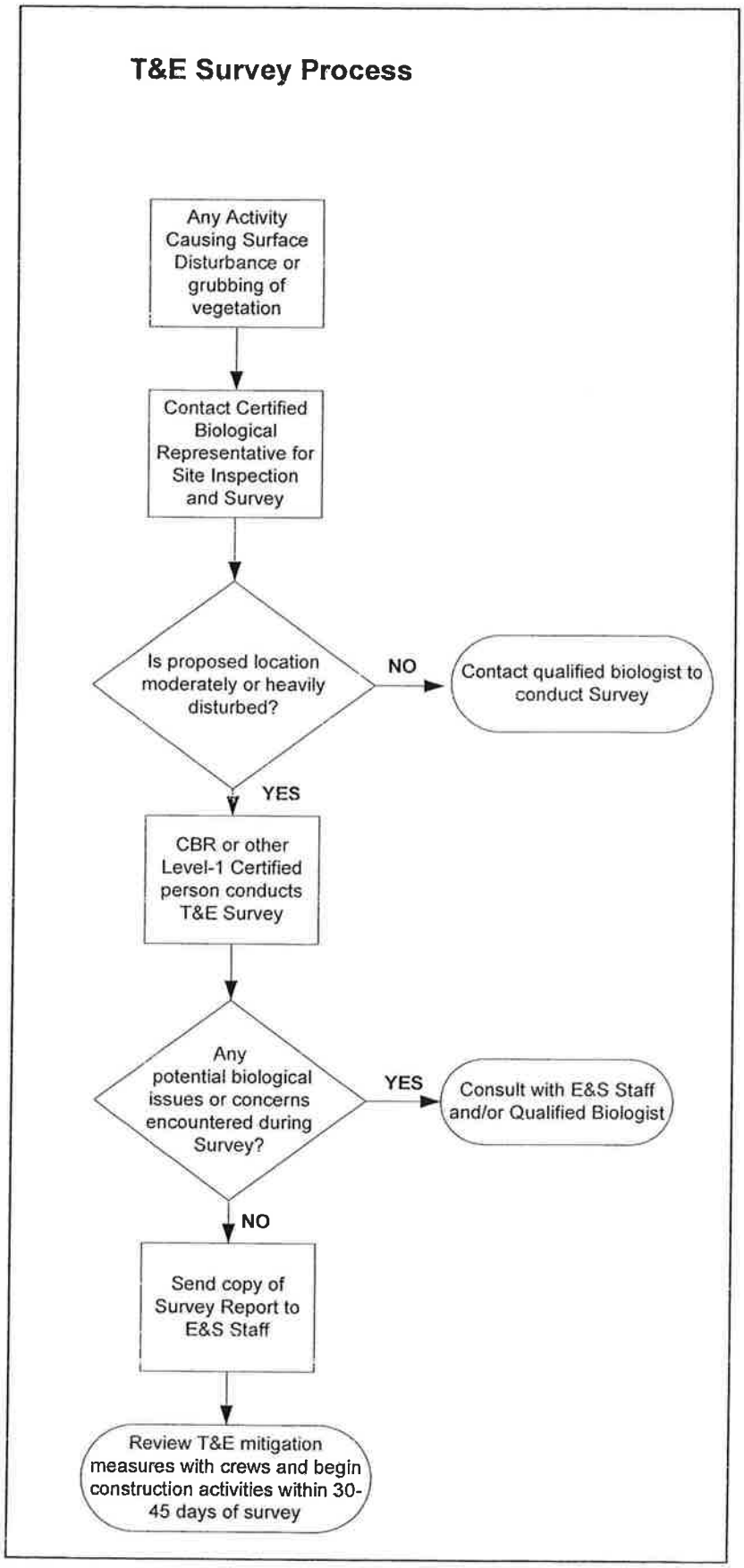
San Joaquin kit fox – Watch for potential dens, culvert pipes, and large key-hole shaped dens too small for coyotes. Look for typical elongated and pinched scat with evidence of fur. If you find potential dens, contact a qualified biologist to determine if the den is occupied.

Other Wildlife – Note all wildlife observed on survey form. All wildlife is protected by law. If the proposed project will negatively interfere with an observed population of animals, contact a qualified biologist for evaluation.

The following Standard Precautionary Measures shall be taken at all Chevron construction locations:

- Prior to initiating activities, potential San Joaquin kit fox dens will be monitored and covered or excavated by a qualified biologist as appropriate.
- Prior to initiating the construction of the project, all company and contract personnel should be oriented to site conditions, sensitive areas, and areas of biological concern.
- No vehicles are permitted off lease roads, except for the construction of the project. Personnel involved in the construction of the project shall stay within the surveyed areas.
- All vehicles shall comply with the posted speed limit on lease roads. If the speed limit is not posted, vehicle speed shall not exceed 25 mph.
- Spillage of crude oil and/or hazardous chemicals shall be immediately cleaned up. All sumps containing oil shall be netted and screened to prevent the entrance of wildlife.
- Food or food trash shall not be left available to wildlife.
- No firearms or dogs are allowed in operational areas
- Cover ends of pipe in storage to preclude wildlife
- Cover trenches or excavations to be left overnight, or provide wildlife escape ramps
- Removal of any trees should be reviewed and approved by a qualified biologist

T&E Survey Process



CHEVRON BIOLOGICAL SURVEY AND HABITAT IMPACT REVIEW FORM

SURVEY INFORMATION

Prepared for: Date: Time:

Field/Area: Lease/Property: ☐ Fee ☐ Federal

GPS: GPS Reference:

Section/T/R(s): Weather:

Project Description:

Type of Disturbance	Project FootprintSqft or acres	A Undisturbed Habitat	B Recovering Habitat	C Significantly Disturbed Or Not Habitat	Habitat Impact Calculation (A x 1.0) + (B x 0.5) + (C x 0)	Total Calculated Habitat Impacts
Permanent (pads, buildings, roads)						
Temporary (Lines, fences, events)						

A + B + C should equal the total project footprint. Conversion factor is 1 acre = 43,560 sq. ft. Use either acres or sq. ft.

SURVEY METHOD

☐ Pads or locations – Impact area plus 200' buffer with transects spaced at: ft.

☐ Linear projects – Centerline plus corridor to either side out to: ft.

☐ Other; describe:

☐ All sensitive burrows/dens were marked with:

TOPOGRAPHY

☐ Flat Terrain ☐ Dry Wash ☐ Rolling Hills ☐ Floodplain ☐ Steep Hills ☐ Potential Streambed

Comments (include elevation if known, and amount of existing disturbance):

VEGETATION OBSERVED AT PROJECT SITE

☐ Non-Native Grassland ☐ Alkali Sink Scrub ☐ Saltbush Scrub ☐ Ruderal ☐ Riparian (stream)

Dominant shrub layer (trees, bushes):

Dominant herb layer:

Sensitive Plants:
☐ None Observed ☐ California Jewelflower ☐ San Joaquin Woolly-Threads
☐ Kern Mallow ☐ Bakersfield Cactus ☐ Hoover's Woolly-Star
☐ Elderberry ☐ Other Sensitive Plants:

Was survey performed at appropriate time for detection of sensitive annual plants? (Spring) ☐ Yes ☐ No

Plants Comments:

WILDLIFE OBSERVED AT PROJECT SITE

☐ None Observed ☐ San Joaquin Kit Fox ☐ Blunt-Nosed Leopard Lizard ☐ Tipton Kangaroo Rat
☐ Giant Kangaroo Rat ☐ San Joaquin Antelope Squirrel ☐ Burrowing Owl ☐ Other (describe below)

Wildlife Comments:

SURVEY RESULTS

☐ The project **should not** result in direct impacts to threatened or endangered species provided that standard Chevron precautionary measures are implemented along with the specific directions listed below in the comments section.

☐ Additional survey and/or follow-up is required; Follow-up results completed by a Qualified Biologist must be attached prior to proceeding with project.

Were any modifications made to project as a result of this survey? ☐ Yes ☐ No

Survey Comments:

FOLLOW-UP SURVEY

Target Species/ Issues | Timeframe

Surveyor Name: Company: Date:

FORM DISTRIBUTION:

☐ *Copy to Area HES Attn:* ☐ *HES BU Staff - 9525 Camino Media* ☐ *Other:*